The Builder.

No. CCXXXII.

SATURDAY, JULY 17, 1847.

THE Health of Towns bill is withdrawn, and the Wellington statue is to remain on the top of the arch at Hyde-park Corner, — that is, if the Government do not change their minds and eat their words again, which, seeing the number of times they have already done so in respect of the arch, would scarcely surprise us. Alas! for the consistency, wisdom, and inflexibility of our statesmen! Competent persons have pronounced against the present site of the testimonial, says Lord Morpeth, and we call upon the committee to redeem their pledge, and take down the statue. The public agree with the competent persons, again urges his lordship, and the statue is to come down. And then, when further attempts to hold their ground have been made by the most pertinacious of committees, his lordship writes to the Duke of Rutland:—

"My Lord Duke,—I have now the honour to acquaint you, that her Majesty's Government feel themselves *compelled to abide by their decision*, that the equestrian statue of the Duke of Wellington should be removed from the top of the arch, and they are about to submit an estimate to Parliament for the erection of a suitable pedestal, which it is intended to place in the Green-park within view of the Duke of Wellington's house. They will not, however, think it necessary to call upon the sub-committee to remove the statue till the pedestal is ready for its reception."

The pedestal is designed, preparations are talked of for lowering the ponderous mass: and yet, after all, the prime minister rises coolly in the House and says, *the Government do not intend to permit the removal of the statue;*—"Since last I addressed the House," were his lordship's words, according to the *Times*, "I have had a communication with the illustrious Duke with reference to the statue; and, in substance, his reply to my inquiry was,—that he viewed it as a question to be considered, not upon individual, but upon public grounds—that many persons were of opinion, that its removal from the arch would be looked upon as a mark of disapprobation on the part of the Crown; and that, though he had received too many evidences of royal favour to suppose there had been any such intention, as such would be the effect, upon public grounds, he deprecated the proposition to take the statue down from its present position. This statement has been communicated to her Majesty, and I have received the Queen's commands to say that the Government *do not intend to permit the removal of the statue.*"

We feel ashamed while we write it, and there are some who ought to feel more ashamed while they read it.

The few preliminary proceedings which resulted in this ultimate decision, were simply these. Lord Brougham, in the House of Lords, moved for the production of the correspondence which had taken place on this subject, and took occasion to say, in the course of his speech, that the Duke would feel himself hurt beyond expression, insulted, and held up to ridicule if the statue were removed,—if they dared to remove it. In the other House, Lord G. Bentinck gave notice that he should move a humble address to the Queen, praying her Majesty not to revoke her grant of the arch as the site for the statue. Upon this, and with reference to the previous statement, Lord John Russell asked for time to obtain knowledge of the present feelings of the Duke (of which by the way, his lordship must have been fully aware), saying:—"I may state that her Majesty has expressed a wish that nothing should be done that could be painful to the feelings, or be considered at all disrespectful to the greatest and most celebrated of her subjects. If I find they are adverse to the statue being removed to the pedestal suggested for it, I should not propose any vote in supply for the purpose; and I am authorized to state, her Majesty would readily consent to the statue remaining in its present position."

And then, in due course, came the decision we have already quoted, involving more injury to the national taste and the national reputation for taste, than may at first sight appear to be the case.

No one attempts to say the conjunction is beautiful: the utmost that is heard from those who advocated the continuance of the statue in its present position is, that "it don't look so bad after all,"—and this of a statue on which thirty thousand pounds have been spent, and an equally costly triumphal arch! And even these know all the time, or they know nothing of art, that the arrangement is contrary to all principles, and that the effect could not be and is not satisfactory. When we asserted long ago, and proved, that the arch was destroyed by the statue, and the statue destroyed by being placed on the arch, the line of argument adopted was quoted throughout the country, and never controverted. We defy disproof.

The reason now given for keeping it on its present bad eminence, all others having failed, is quite preposterous. When the committee said, that to "overthrow the monument in the Duke of Wellington's very sight" would be a "most offensive and wanton affront," and continued,—"He, from the height of his glory may despise it; but it will be deeply felt throughout the whole British empire—it will be deeply felt by all his old companions in arms throughout Europe, and by all the governments of the nations which he had contributed to save;"—they talked absolute nonsense, and knew it to be such, but did so because they believed it would tell. How to explain the Duke's belief, however, that its removal would be looked upon by many as a mark of disapprobation on the part of the Crown is more difficult. Surely his grace cannot believe this? The Government and the country are alike anxious to provide for the statue a fitting pedestal,—the most fitting pedestal. The former foolishly permitted the appearance to be tried *in situ*, but with the express stipulation, that if not approved of, the statue should come down; and now, forsooth, they say virtually, whether the effect be bad or good we care not, if you remove the figure, you insult our distinguished commander. The artifice, not to say subterfuge, is really too transparent.*

We regret this decision in respect of the statue even more than the withdrawal of the Health Bill, much as the latter is to be deplored, and vehemently protest against it on the part of the vast majority of unprejudiced competent persons throughout the Kingdom. The discussion of the latter subject and the hold its importance is taking on the public mind, will themselves tend to make the necessity of legislation less urgent; moreover early in the next session an improved bill may be brought in and the object attained; whereas in the case of the arch, if the whole of the scaffolding be removed and the question once closed, there for many years to come the monstrous conjunction will remain, to disfigure the western entrance to the metropolis and vitiate the public taste,—at one and the same time our laughing-stock and our disgrace.

* The Government even proposed to make two Wellington memorials instead of one, by directing that the arch should be ornamented, after the manner in which triumphal arches were formerly adorned, in honour of the Duke, and dedicated to him!

SKETCH OF THE PROFESSIONAL LIFE OF GEORGE DANCE, Architect, R.A.*

THERE are few architects since the time of Sir William Chambers who have more worthily achieved a high degree of professional reputation than Mr. George Dance; and on a recent occasion, when our excellent friend and late vice-president, Mr. Tite, favoured us with an instructive and interesting epitome of the lectures delivered at the Royal Academy, by Sir John Soane, it occurred to me that some account of the master mind, from which Sir John derived much of his professional knowledge, might prove an interesting subject for a paper.

In this labour of love I have enjoyed the advantage (through the kindness of my friend, Mr. Thomas Poynder) of an introduction to Mr. George Dance, of Peter House College, Cambridge, a grandson of the subject of our present memoir; and the biographical part of this paper has been supplied by that gentleman,—a gratifying proof that the abilities and reputation of one of England's most distinguished architects are appreciated and cherished by an immediate descendant, worthy of the name he so honourably bears.

To our indefatigable honorary secretary, Mr. Bailey, I am also greatly indebted for an examination, from the Soane collection, of the designs and working drawings of several of Mr. Dance's works, which will be alluded to in this paper.

George Dance, born March 20th, 1741, O.S., was the fifth son of George Dance, architect, and clerk of the works of the city of London.† Mr. Dance, sen., was a man of considerable eminence in his profession. He designed the Mansion House (a building, in my humble judgment, possessing many fine points, and by no means deserving the severe criticism it has been subjected to): Shoreditch church, Bethnal-green, Aldgate, and St. Luke's, Old-street, are also the works of Mr. Dance, sen.

When about seventeen, George Dance proceeded to Italy for the purpose of studying architecture, being placed by his father under the care of his elder brother, Nathaniel, then studying the works of the great masters of painting in that land of the fine arts.

Surrounded by the monuments of ancient and modern art which adorn the cities of Italy, and visiting successively Rome, Naples, Florence, and Parma, he devoted himself with such ardour to the cultivation of his profession, that in a short time he had become so far master of the science as to gain the prize in architecture,—a gold medal,—given by the Royal Academy of Fine Arts in Parma in the year 1763.

The subject proposed was a design for a public gallery for painting and sculpture, and it fortunately happens that Mr. Dance's letter to his father, giving an account of the competition and his success, is still preserved.

The letter is dated from Rome, June 7th, 1763, and is as follows:—

"The inclosed is a sketch for a public gallery for statues, pictures, &c., which subject was given last year by the Royal Academy of Parma for the concurrence in architecture. As I was willing to distinguish myself before I left Italy, I thought there could not be a better opportunity than that which offered itself at Parma. I therefore applied myself with all assiduity, and sent my drawings to Parma last April, where, together with many others from all parts of Italy, they were exposed in a public hall for some time, till the final judgment, which

* Read at the closing meeting of the Royal Institute of Architects.

† He was at that time styled 'master,' and not, as at the present day, "clerk of the city works;" and the office appears to have been in those days rather differently conducted. The appointment was held by patention; and the remuneration was not by salary, but according to the services performed; there was no staff of assistant clerks, and Mr. Dance, sen., had all the artificers to meet him on a stated day once a week, at the Mourgate Coffee-house, to receive his orders and instructions.

was at length determined in my favour, and I have gained the premium, which is a gold medal of two ounces and a half weight. You will, perhaps, wonder I should rather concur at Parma than at Rome; to which I reply, that at Rome the judgment is so partial, and protection of cardinals, princes, &c., of such consequence, that in reality little honour is to be gained by it, likewise no person can concur who is not in Rome at the time of concurrence, consequently the number of those who concur must necessarily be less in Rome than in Parma, where all Italy, nay all Europe, may concur. I have not yet received the medal, which is to be sent me at the same time that the decision of the Academy is printed, which I shall send you as soon as it comes to Rome; as to the sketch on the other side of the paper, I beg you will excuse the incorrectness of it, as I had scarce time to finish it by this post: as it is only just to give you an idea of the general disposition, I had not time to put any more than two sections and the plan. The drawings I sent to Parma were five in number, viz., 1, The Great Plan; 2, The Section lengthwise through the great gallery and halls of entrance; 3, The Section through the said gallery breadthwise, and through the cortiles; 4, The Section through the rotunda; 5, The Façade. The plan was drawn upon four sheets of large imperial paper, and the sections and front were upon five sheets lengthwise of the same paper each.

All the columns within the gallery were of the Corinthian order, those of the cortiles Ionic, and those of the façades Doric. This work, my dear Sir, has been my occupation for these 8 months past, and I hope will, in some measure, plead my excuse for not writing; my mind has been in such agitation that I confess I have passed whole nights without sleeping; at length I am at ease, and never felt truer pleasure than I do at present, as I hope this will convince you that you have not misspent your favours on one who is entirely unworthy of them; this has hitherto been my greatest ambition, and will always be the bent of my wishes.—I am, honoured Sir, your most obliged and most obedient Son,

(Signed) GEORGE DANCE."

The report which accompanied the medal bestowed a highly flattering eulogium on the successful competitor; among other favourable notices it contained the following remarks:—

"The beauty of all its forms, the grandeur and just proportions of the edifice, recal to mind and represent to the eye the magnificent monuments of the ancients, and that perfect taste which they put into their decorations. The author cannot be sufficiently praised for the study and happy choice he has made of these most commendable models. Every thing in his design appears suited to its place; it would be difficult to take away from the decorations, or to add to them, without impairing the effect; they are numerous without confusion, and suited to the subject."

The design without doubt indicates both talent and careful study, but I must confess I do not discover any of those marks of originality or genius in it which are so conspicuous in Mr. Dance's subsequent works; I regret that I can only produce to the meeting one other of Mr. Dance's architectural studies during his professional tour, but I am happy to say that this one is of rare excellence. A more careful or accurate study of that beautiful specimen of Roman architecture the circular temple at Tivoli, I have never seen, and I take occasion to recommend it particularly to the notice of the students of the institute, as an example of neatness and accuracy combined with freedom of drawing.

Mr. Dance evidently felt his subject both as an architect and an artist. The date of these drawings is 1761-2.

Mr. Dance was admitted a member of the Arcadian College at Rome, and of the academy of St. Luke in the same city, in 1764.

Having completed seven years of assiduous study in Italy, he returned to England, and in 1768, at the age of twenty-seven, succeeded his father in the appointment of clerk of the City works. One of the first buildings he was engaged upon was the small parish church of Allhallows, on London Wall, the design of which was approved by the trustees in May 1765.

This building is of very unpretending character, the plan is a parallelogram with a semicircular apse at the east end, and a small vestibule and cupola at the west. The ceiling is vaulted and the church fortunately has no side galleries. It must be confessed that this is not one of Mr. Dance's happiest productions. He was accustomed to call it his first child; his second was a far better specimen and one of larger growth "the prison of Newgate." The date of the contract drawings for this building is June, 1769, and they are signed by the contractors, George Wyatt, John Devall, jun., John Read, and Joshua Hobson.

This building has always justly been considered as one of Mr. Dance's finest works; the architecture of the exterior is highly characteristic of the purposes of the structure; at the very first view the spectator is impressed with its grandeur, solidity, and security. The most successful portions are probably the entrance lodges designed to form important features in the façade: they are stamped with so strong a mark of gloomy grandeur and severity, as to create in us the belief that when designing them the architect must have had in his mind Dante's celebrated inscription.

"Lasciate ogni speranza voi ch'entrate."

The centre portion of the building, forming the governor's house, is not so successful in design as the other parts; the domestic air which is given to it as a residence does not harmonize with the more severe and solid portions of the prison. When first built, this centre part was terminated by a pediment; the present attic appears to have been substituted at the time of the reinstatements after the riots, in the year 1780; the entrance doorway in the original design was also more in character, and more important than the present one.

I need hardly dwell upon the interior arrangements of the prison; at the period in which it was designed, it was no doubt suited to what was then considered to be immediately requisite. At that day the system of classification, and the reformation of criminals had, unfortunately, not engaged public attention: the security of the prisoners appears to have been nearly the only object which was well considered.

The contract drawings for St. Luke's Hospital for Lunatics are dated 1782, and are signed by Joshua and William Hobson, as the contractors. This is a building well worthy the architect of Newgate, and although perhaps not so well known as that structure, is deserving of great commendation for the harmony and appropriateness of its design.

Giltspur-street prison appears to have been the next public work of importance designed by Mr. Dance; but this is by no means to be placed in comparison with the two buildings just alluded to; the repetition of three pediments in the same façade is unworthy the hand which has accomplished so much better works.

In his capacity of surveyor to that noble institution, St. Bartholomew's Hospital, the church of St. Bartholomew the Less came under Mr. Dance's superintendence, and in 1789, he nearly rebuilt that edifice; and although there is a certain degree of elegance and ingenuity exercised in the treatment of the octangular plan of this building, Mr. Dance would not be forgiven in these days, for departing so much as he then did from the original structure. We must, however, make some allowances for the taste and style prevalent at that time, when mediæval architecture was so little understood, and when our ancient churches had no staunch defenders in Camden or Ecclesiological societies. In the year 1793, I find that Mr. Dance designed a new laboratory and several additions to the hospital.

The East-India House, in Leadenhall-street, was rebuilt in 1796; and it appears that Mr. Dance submitted an elevation for that building.

In the same year Mr. Dance appears to have been engaged on that great work, the design for the improvement of the Port of London, which he afterwards, in 1802, submitted to a select committee of the House of Commons.

This design is one of great magnificence and practical utility; it consists of a double bridge, in the place of old London bridge, to admit of the passage of ships by the alternate elevation of a drawbridge on either of the two bridges, whilst an uninterrupted way over the other would be afforded at all times for carriages and foot passengers, without impeding the navigation, and without the necessity of such elevated arches as the height of ships' masts require. The plan embraced the embankment of the river both above and below bridge, the erection of quays and a line of warehouses extending from the Tower to the bridges, with dock entrances, and terraces on arches, the Custom House being placed in the centre. Besides these manifestly advantageous alterations, he proposed to throw open to the river the noble monument erected by the genius of Wren, making it the focus of an extensive amphitheatrical area on the north side of the Thames, and to erect a naval trophy in the centre of a similar space on the Southwark side. The bridges were to be perfectly level, consisting each of six arches of great span, independent of the centre or drawbridge.

This magnificent design is well given in a mezzo tint engraving, from a picture by Mr. Dance's early friend, William Daniell, and, of course, is well known to the body I am now addressing.

In these days of gigantic engineering, when mountains and rivers are passed under by tunnels, and straits passed over by tubular bridges, Mr. Dance's design may not at first strike the eye as being of that important character which I have claimed for it; but when it is examined in an architectural, as well as in an engineering point of view, I think it will be admitted that it is the conception of a master mind, and that its very magnificence and the necessary sacrifice of valuable ground were the principal reasons of its non-adoption.

A failure in this account, however, was not confined to the city architect, for among many bold and ingenious designs submitted to the House of Commons at that period, I find one by Messrs. Telford and Douglas, to replace old London-bridge by one of cast-iron of a single arch, 600 feet span, and 65 feet in height!

Mr. Dance appears to have been consulted on the subject of the approaches to this *pons triumphalis;* and I find a drawing of his, shewing that the inclined line of approach would have commenced in Bishopsgate-street, near the London Tavern, and terminated on the Southwark side by the Town-hall. It would have formed a most productive line for compensation claims, and a source of no little employment for juries and referees.

The other principal works upon which Mr. Dance was engaged for the corporation of London were the front to Guildhall, which (bearing in mind a very homely but apposite proverb) I will not detain the meeting by commenting upon. The council-chamber, however, is an extremely successful work. It has a pendentive dome springing from four semicircular arches, and is altogether a very elegant apartment, and of pleasing proportions. Finsbury square was from Mr. Dance's design; and he also designed and carried through the improvements in Skinner-street and Picket-street, Alfred-place, Tottenham Court-road, and its terminal crescents.

I believe the last work on which Mr. Dance was engaged for the city was the fitting up of Guildhall, on the occasion of the grand entertainment to the Emperor of Russia and foreign potentates in 1814. I understand he entered on this work quite *con amore;* it was a grand occasion, on which he put forth all his energy; and the committee, having very properly placed the whole matter, both as to design and the means of executing it, into his hands, he was enabled to produce the most satisfactory result in a comparatively short space of time. A view of the hall, as fitted up for the occasion, was painted by Mr. William Daniell.

Besides his official appointments, Mr. Dance appears to have had an extensive private practice, being employed by several noblemen and gentlemen of fortune; among others, the Marquis of Camden, at Bayham Abbey, Lord Ashburton, at Seven Oaks, the Marquis of Lansdown, in alterations and additions at Bowood, and the library at Lansdown House, Berkeley-square; Lord Ashburnham, at Battle, Sussex, Sir Francis Baring, Stratton, Hampshire, and Sir George Beaumont, Coleorton, Leicestershire. The studies and working drawings for these several works are now in the Soane collection, and they will amply repay a careful examination. Those for Ashburnham-place are full of interest. The design for the principal front of this house presents a very curious mixture of Italian and Gothic architecture; some portions are similar to the Guildhall front, and several of the ornaments and enrichments remind us forcibly of similar features so generally employed afterwards by Sir John Soane. The staircase at Ashburnham-place forms a capital

study, and the sketch for it, as well as many others, shew us how careful was Dance in studying the effects of all his buildings, with their several parts, as seen in *perspective*, thus avoiding those incongruities and difficulties in terminating the returns, which some of our first practitioners have occasionally been led into, in consequence of studying *only geometrically*.

Interior decoration appears to have been a favourite study with Mr. Dance; and amongst the collection are some very elaborate designs for the library at Lansdown House, with painted walls and ceilings, after the manner of the ancients, as shewn in the remains of their baths and in their buildings at Herculaneum and Pompeii. Coleorton, in Leicestershire, appears to have been one of Mr. Dance's most important works. The arrangement of the plan appears to be well conceived; but of the Gothic detail of the building I cannot speak in terms of praise. The owner of this seat was the talented and accomplished Sir George Beaumont, well known as a patron of the fine arts, and a man of high reputation for taste and judgment; and so highly did he esteem and appreciate the services of Mr. Dance as his architect, that upon the completion of the building he caused an inscription to be placed over the portal as follows:—

This house
was erected on the site of the old house,
by Sir George Beaumont, Bart., and
Dame Margaret, his wife.
The first stone was laid on the
21st day of August, 1804;
It was inhabited for the first time on Friday, the
12th day of August, 1808.
The architect
was GEORGE DANCE, Esq., R.A.,
who has manifested as much friendship by his attention to the execution of the work as he has shewn good sense, taste, and genius in the design.

In a private communication, Sir George Beaumont, alluding to Coleorton, says,—"I verily believe that the hall will become a model for future architects; it is interesting and perfectly original, and has been admired not for its costliness, but for its simplicity and its proportions."

Another of Mr. Dance's most successful works may perhaps be instanced in the façade of the Shakespeare Gallery (the present British Institution), in Pall Mall, executed for his friend, Mr. Alderman Boydell, in the year 1789. In the great essentials of harmony, character, originality, and refinement, it has always struck me as being *pre-eminent*, and the pilaster capital, one of the happiest and most original efforts that has been produced upon the few varieties we have from the invention of Callimachus. The successful application of the *ammonite* here introduced for the volute is surely a lesson to us that we need not confine our ideas for enrichments to Nature's *Flora*, but that in her shells and aquatic productions there is a rich and wide expanse for the student to avail himself of, and to apply in the enrichments of his art. It has often surprised me that after the admirable application of the *Echinus* by the ancients as a moulding, we have not followed up the idea by adopting the forms of other shells of equally beautiful outline.

The plan of the gallery is also happily conceived, and the introduction of the staircase into the middle of the gallery *itself*, an arrangement by which every inch of the surface of the walls is retained for the pictures, is most successful.

The hall of the Royal College of Surgeons, in Lincoln's-inn-fields, was one of the last works Mr. Dance executed in London, and I believe that Mr. Lewis was associated with him in it. The success and increase of this institution has nearly caused the obliteration of Dance's work, and a great architect of the present day has used poor Dance much in the same way as was done of old to Bramante and the successive architects to St Peter's basilica. There is enough, however, left to shew the purity and simplicity of Dance's design.

From Mr. Dance's intimacy with Lord Camden, who was at that time Recorder of Bath, Mr. Dance was engaged by Mr. Palmer as the architect for the new theatre. This elegant building has been greatly admired, and our much esteemed brother member Mr. Bellamy, on a recent visit to Bath, favoured me with the following remarks, from which perhaps it may be inferred that its merits have been somewhat overstated. Mr. Bellamy says,—"From the slightness of the projections and the absence of dressings to the windows, the elevation is rather insipid, and but for the masks and lyres would possess no characteristic expression of its purpose, a quality in which Dance must be considered to have been in many instances eminently successful."

I think our friend has been hardly indulgent enough in his criticisms upon the *exterior*, which although somewhat tame in design, is not devoid of character or elegance. Of the *interior*, however, he says, that it is well proportioned and more studied than the exterior; and, I think, when the meeting will, by and by, have an opportunity of examining the charming studies for the ceiling, they will agree with me that Mr. Dance, in a most eminent degree, combined the qualities of the artist with the architect.

I have now completed a very hasty, and I fear, a very imperfect notice of the principal works executed by Mr. Dance, and it was his fate, like many other great artists before him, to have some of his finest designs put on one side and forgotten. The rejection of his scheme for the improvement of the port of London, I have already alluded to, and I find among his papers, a vast design for laying out the Marquis of Camden's estate at Camden Town. Spacious streets eighty feet in width, with a crescent, and a vast eliptical area surrounded by dwelling-houses, and termed the *Colosseum*, would almost lead us to the belief that our architect, strongly impressed with the magnificence of the then flourishing city of Bath, was disposed to plant a rival in the suburbs of the metropolis.

For the following concluding remarks I am indebted to Mr. Dance's grandson, the present Mr. George Dance.

On the establishment of the Royal Academy of Arts, in 1768, he was constituted one of the original forty academicians, by George III., in which distinguished body he held the office of auditor. For his services in this capacity, the Royal Academy presented him with a piece of plate, in testimony of their respect and esteem. He was also professor of architecture in the academy, and occasionally exhibited at Somerset House.

A member of the Royal Society, as well as of the Antiquarian and Archæological Societies, and of the architect's club in St. James's-street, he associated much with the most distinguished men of science and letters of his days. In his professional capacity he enjoyed the patronage of those most able to appreciate his talents, and to afford scope for their employment.

A residence in Italy and France had made him a thorough proficient in the language of both countries, and had enabled him to cultivate with success his naturally great talent for music; he played finely on the violin, violincello, and flute, and composed several pieces which are much admired.

He published two volumes of portraits of eminent persons, many of them academicians, which were engraved by William Daniell, and several collections of miscellaneous sketches full of imagination and humour were made and are still cherished by many of his friends. Few men have been gifted with a purer or more refined taste in poetry, painting, sculpture, and all that relates to the fine arts.

His general knowledge was extensive, an accurate mathematician, and mature scholar in many departments of science, he was enabled to bring all the powers of his well-stored mind to bear on the subject immediately before him. A large circle of friends esteemed and admired a man whose learning, good humour, and all companionable excellence in private life could not fail to render him universally beloved. He was the zealous and ready friend of merit in whatever province it might appear.

It may truly be said, that the country was adorned, and architecture improved by the science, taste, beauty, and grandeur, which characterised his works.

Nature had been liberal to him in person as well as in mind, his features were regular and expressive, and his eyes remarkably full of force and lustre.

A portrait of him was painted for his son, Sir Charles Dance, by Sir Thomas Lawrence, another by Jackson for Sir George Beaumont, from which a fine engraving was taken, and a third by Hilton, which was also engraved.

A bust by Rossi, considered to be a good likeness, is in the possession of Thomas Poynder, Esq.

He died at his house in Gower-street, January 14th, 1825, aged eighty-four. The Royal Academy, of which he was the last surviving original member, paid him the honour of following his remains to their resting place in St. Paul's Cathedral, where they were deposited in what is called artists' corner, near to those of Sir Christopher Wren, and Mr. Dance's late friend Rennie, an appropriate situation for one allied in genius to both these illustrious ornaments of their country.

SAMUEL ANGELL.

ON ARCHITECTURAL STYLE.*

THE proper study of that which is comprehended in the idea STYLE might be easily made to involve almost the entire subject-matter of the province of Architectural Design. The present inquiry, therefore, cannot pretend to overtake more than a general view of a few prominent points, with the purpose of leading to more particular consideration of details in individual study.

And it may be remarked, that, at the very threshold of an inquiry into that which is called Style in Architecture, there is forced upon us the discrimination, out from among the adjuncts which are commonly identified with it to its obscuration and loss, of that nevertheless clearly distinct and separate entity to which a little School in the present day profess that it would be well to confine more particularly the term Architecture. The subject STYLE is a subject of ART alone. The conception of the idea of it involves the segregation of THE FINE-ART ARCHITECTURE,—the distinction between it and its mere adjuncts,—the comprehension of the perfect separateness of Art from that to which Art must refuse all relationship. When we think of Style, we see a thing that has no commutability with the superintendence of workmen; Poetry is not more utterly distinct from the correction of the press. We perceive the Fine-Art Architecture as an integer of thought, no longer confounded with the calculation of cost, or the contriving of builder's work according to the Act;—as Handel stands perfectly apart from the organ-blower, or Raffaelle from the grinder of colours. Style is a thing purely of ART.

And if we have thus at the outset a valuable idea for aiding a discrimination which many thinkers seem to find it hard to make,—for clearing away that which is an unfortunate obscurity with us,—it is not by any means an unhappy opening for our investigation to take the opportunity of so defining that which is the fundamental essence of our subject. It must be a very important step gained, when the Architect attains to the proper comprehension of his capacity of Artist as abstracted from all other capacities,—an important step in self-advancement in that Design-power which no one can affect to despise; and to teach the learner the clear distinctness of the pure Art from the mere means and modes of its embodiment, and the adjuncts, whether necessary or fortuitous, of its practical every day history, is to give him the best first lesson in its true philosophy.

Not that it is other than eminently necessary, however, for the due appreciation of our subject that the distinction I speak of should be carefully drawn. The discernment of the philosophy of Style can never be hoped for till the eye can look steadily at that pure Art in which Style has its being. The contriving of plans, and the drawing up of Specifications, and the superintendence of works, with all other things which are very excellent in their way, and very indispensable in their value, but which have no connection with the subject, we must quite set aside for the time, and abstract the perfectly separate *Fine-Art* to stand alone in the mere nature of itself, before we can hope to secure that nicety of judgment which so delicate a subject of thought demands.

Having thus defined Art,—that which lies in the design of beauty for the production of pleasure,—it may be said of it in a general

* Read at a meeting of the "Architectural Association," Southampton-street, on the 7th inst.

sense, that the essence of its pleasurableness works not in one way but in infinite variety. One mind comes to relish one particular manner of its action so as to hold this to be above all others as the best; but as perhaps every possible variety is to be found with its peculiar admirers, and as we know fashion and custom to hold so important a sway in biassing the taste, we may safely lay down the proposition that Art works in infinite variety of system with equal excellence in all. This is the foundation of style. In Music, in Painting, in Poetry, in Architecture, there are a thousand ways to pleasure—a thousand *Styles*—all equally delightful and beautiful and true.

We may again say in a general sense, that there is a manner of viewing The Beautiful whereby it has its essence in the action of two antagonistic principles of likeness and unlikeness—amplifying themselves into uniformity and variety, correspondence and contrast, simplicity and intricacy. The tones of Music do not form melody unless they are combined in a certain *correspondence;* while at the same time if the correspondence were perfect monotony there would be no Music in no *variety*. There must be the action of a principle of *diversity;* while at the same time there must be the action of a principle of *relation* (as in the regulation of the intervals, the diatonic scale, the rules of melody);—a likeness conjoined with an unlikeness;—a variety governed by a uniformity. And Design in all Art lies in the conception of a certain variety—a certain novelty—a certain departure from monotony—which is pleasing, by the government of a strict relation—correspondence—likeness — uniformity — which constitutes Style. There are an infinity of styles: consistency of style is that conformity of the parts of a whole by which it is stamped as being connatural and of a homogeneous spirit: peculiarity of style is that peculiarity of spirit which one work of The Beautiful displays in difference from another: the essence of Style lying simply in the essence (whatever this may be) of character and expression and sentiment,—a varied essence developed in varied manifestation.

The exact demarcation of the good and the bad in Style may be a matter extremely difficult of decision; it may even be practically a point quite exceeding those limits in perplexity beyond which the judgment can scarcely pretend to rely upon the precision of its own powers; but that there are still unalterable boundaries, and uncompromising rules in the very nature of things—in the elements of that which is the Beautiful, it is well to keep always in view. That it is beyond our reach weighs nothing against the still certain existence of a universal government of the right and the wrong, for ever fixed in its nature and sure in its action. And however the full depth of these first essences may seem a perfectly vain object of research, yet can we undoubtedly, and with ease and certainty, attain to many very useful principles: while we may be equally assured that the eduction of such, by the generalization of evidence, and the weighing of the abstract, is the only philosophical means of obtaining that knowledge which is above empiricism, and that skill which is superior to mere experiment.

There is an empirical knowledge of Style, among architects and critics at the present day, which is very far superior to what can be claimed to have been possessed in any former time,—at least in so far that we comprehend in present practice more variety of style than our forefathers of any age can show. The labours of the Antiquary have gathered and systematized the remains of the past, with a care and nicety peculiar to our days; and the present practice of architecture lying entirely in the use of the systems of design thus collected from antiquity, there are demanded of our architects attainments in respect of style—in knowledge of certain system of its variety—which hitherto were never required to be displayed. And although our rule of style, instead of being philosophically educed principles of unity of character, is but the mere rote-precedent of copyism—an almost imaginationless reproduction by the authority of old works,—criticism being not reference to philosophy, but to antiquity—not any weighing in the scale of Truth and Beauty, but a balancing against the mere formulæ which we gather out of the ruins of the past,—Art being not the work of fancy under the control of intellectual taste, but the mere transcription of the bygone controlled by scarcely any superior principle to simple revival,—education being not any investigation of what the beautiful is, but a learning of what the practice of the ancients was,—although in all this we must own the charge that, in disregarding the pursuit of the abstractedly true and preferring the mere digging up of ruins, our age is pursuing a road very wide of the mark of what intellect pronounces Art to be, yet the study of character which this mode of practice forces nevertheless upon the mind, the education in style which indirectly it must more and more produce, ought to be a source of pleasure to us, and confidence. For the more that accuracy of style by precedent is insisted upon (since this is the shape which the progression takes), the more must we naturally come to perceive the true facts of style which the precedents contain—the true system on which Design proceeded when precedent-rule had no being, when naturally-working imagination was the manner of design and abstract judgment the test of criticism. And the more perceiving these facts, the more must we come gradually to inquire into their reason. And this, although an indirect road, may certainly, we will confess, be a good one.

But, imperfect as the criticism of precedent must always be, we have also additionally to observe, that the system of its arrangement in present practice is not by any means complete enough, or its legislation sufficiently precise, to attain the appreciation of its fulness of merit, or to equal the nicety of design with which its original authors worked. Although there is evinced by many a one among our modern architects now, a very praiseworthy appreciation (in a degree) of the truth of style to which the more naturally thinking ancients in their liberty of thought attained, yet there is very much in their works, both the classic and mediæval remains, to which our discrimination of Style does certainly not extend; we have learnt to detect much of their excellence,—but there are still further excellencies—more delicate and refined and deep, which the best of us may well suspect to lie beyond our present reach, and to which undoubtedly we very frequently indeed can detect each other doing violence.

Precedent is thus far a thing to be valued, that it is a voice from an age which, in so far that it was untrammelled by precedent-rule itself, was a better age than this; and the authority of Precedent is thus far a thing to be relied upon, that the intellect of man in those days being freer (in our peculiar province) than now—freer and more under the action of the true principles of judgment which lie in Nature and Reason alone,—although there were failings and faults as there will always be, and although there were peculiar imperfections springing from the peculiar imperfections of the times, Design proceeded more *in the natural way*,—and, following Nature in exact adherence to fact (no sham, no concealment), and obeying Reason in having no standard of criticism, but abstract rationality of means and end, purpose and expression (no misappropriations, no misapplications, no subversions,—no Nelson columns, no stone proportions in iron, no "architecture applied to machinery"), the human mind produced of necessity works rightly principled, by the natural action of that mechanism of man's thought which can effect wrong only when some counteraction is laid upon it, to dislocate its agencies and perplex its operation. And thus are the precedents of uncopied design (when really uncopied)—the works of the Greeks, partly those of the Romans, partly those of the earlier dark ages, and generally those of the later, with fragments and episodes in the works of the times of the more immediate past,—thus are these precedents of uncopied design, although perhaps to be always, as the world grows wiser, in some respect or another capable of improvement, certainly to be allowed a sort of claim of authority, as being the production of a right operation of mental mechanism, and therefore (generally) *right*.

But (as I observed) following precedent for our standard of Style as it is the custom at present to do, the present extent to which the system is laid down, and the present manner in which it is carried out fall short, very materially, of the fulness of the spirit of ancient works. And indeed we may affirm it as indubitable, that the greatest attainments possible in the eduction of system merely from examples, must always leave the deeper and more delicate distinctions, in which lies so great a share of the charm of authentic works, undiscriminated and unavailable in reproduction. Even when we have attained to the discernment of the faults, so as to be able to avoid the bad, we may still fall short of the full spirit of the good, and fail to overtake many of the beauties. And it is so with our precedent-critics,—their knowledge of Style is only partial—general more than particular—extending only to the broader distinctions and chief lineaments, while the government of Style carries its authority with equal force down to minute details of unity and relation, and delicate discriminations of sentiment and character which are quite beyond their vision. It was so when Classic copyism was in vogue, it is no less so now, when this has chiefly given way to Mediæval copyism,—our reproductions of ancient Design lack very much of the spirit to which ancient works owe their essential value: and it is but a necessary result of the simple fact of copyism,—in so far that the ancient mind worked *naturally*, and followed those abstract principles of Design which are innate in the unadulterated imagination, while the modern mind has but the far more difficult and uncertain guide of imitation,—in so far that the ancient works are designed by the spirit of Design, and the modern by quite another.

The study of examples of design for the eduction of the principles of Style is one of the very first importance to the student. The perception of the grand distinctions which primarily separate what we are accustomed to call peculiarly the various styles of Architecture may soon be mastered; and the discernment of the chief subdivisions of those styles produced by different periods, and the idiosyncracies of different nations, is an attainment which it is not difficult to reach; but the knowledge of Style is not therefore an easy acquisition, or the acquirement of its spirit a simple object of research;—for these are but the greater distinctions, which appear on the surface, but the elements of whose system in its truth and fulness lie deeper, in the more delicate and more difficultly discriminable differences which, although the lesser principles, are frequently the more important directors of beauty in Style. The more you search and compare and test the authentic works of antiquity, the more will you detect in them minute but essential illustrations of variety of spirit, and the more will you find exemplifications of accurate aptness and adjustment in style to which their modern imitator is a stranger—delicate tuning in a design for which the modern hand seems scarcely light enough, for which the modern ear seems scarcely to possess the nice distinguishment. And the perception of this is learning Style, and acquiring therein one of the vital powers of the Architect.

And lastly, as the great value of this employment of Precedent and this study of its system is, that the result may be the overthrow of the spirit of Precedent itself in its present government, to the evil consequences of which our inferiority to the ancients in our very imitations of them, and our still greater inferiority in that strange disavowal of all power of originality which appears to be so established with us as an axiom of thought, are truthfully to be referred;—and as the hope is a rational one that even our present precedent-government itself, by its increasing strictness, will ultimately terminate in its introduction of the better spirit of true Design to supplant itself;—it may not be amiss to counsel the student thus studying the precedents of antiquity, to study them with the special purpose among the rest of rising superior to their government—rising to the level assumed by their authors in their production, and displayed, by the very fact of their producing them, to be within the reach of the right thinking mind,—to study them, in short, all the while as mere examples of what *has been produced*, not canons of what *is to be reproduced*—as works of genius which he ought to equal as equally the possessor of the power with their producers, or rather ought to *excel* as excelling them in the advancing progress of the world. Robert Kerr.

AWARDS OF OFFICIAL REFEREES.

WOOD BOND AND PLATES.

The district-surveyor of Greenwich laid an information against William Heath, of Charles-street, Horsleydown, for having placed wood bond and plates into the external walls of two dwelling houses in Blackheath-road, "in such lengths as to render the parts of the walls above wholly, or in great part, dependant upon the wood for support, contrary to Schedule D, part 2, of the Act, and also contrary to an award of the official referees, made upon a requisition from Oldfield and Baker, D.S. dated May, 1846."

At the hearing "it appeared, that the building in question contains four stories, and that there are two tiers of continuous wood bond, 4 inches by 3 inches, in the external walls in the second and third stories, the walls being 14 inches in thickness, without recesses, except at the staircase; and Mr. Badger, on the part of Mr. Heath, contended that bond timber thus laid in walls, did not render the walls in great part dependant upon the wood for support, and might be withdrawn without endangering the safety of the superincumbent structure, and therefore, was not contrary to the Metropolitan Buildings Act; and further, that it was not contrary to the award referred to by the district-surveyor in his said information."

The referees awarded: "That timber, laid continuously as bond or plates, or otherwise, in a 1½ brick or 14-inch wall, flush with either face of the wall, or so that it have not at least 4 inches of brick or stonework on each of its sides, does render the part of the wall above it in great part dependent upon the wood for support; and that the withdrawal of any such wood would endanger the safety of the superincumbent structure within the meaning of the Metropolitan Buildings Act. And inasmuch as the walls in question are of such thickness of 14 inches, and the bond timber and plates in question are laid continuously flush with the inside faces of the said walls, the parts of the walls above such bond and plates are in great part dependant upon the wood for support; and inasmuch, moreover, as such timber might not be withdrawn without endangering the safety of the superincumbent structure, the bond and plates in question in external walls, and in continuous lengths, are contrary, in this respect, to the Metropolitan Buildings Act; and we do hereby direct the said William Heath forthwith to remove from the said walls, and to replace with brickwork, all bond and plates of timber so laid contrary to the said Act, or so much thereof that there be in every pier of the said walls, a part equal in length upon the face of the wall to the thickness of the wall, wholly of brickwork, and without any timber therein from the foundations of such walls up to the underside of the plates under the roof, or in default of such removal, to pull down to the level of the bed of the lower tier of such bond and plates, all and every such walls as may have been so irregularly built as aforesaid."

The Archæological Institute of Rome.—The anniversary of the foundation of Rome has been celebrated this year in an especial manner by the above society, which truly thought, that only under a really liberal government, the knowledge of antiquity can prosper. If, on the other hand, the number of excavations has decreased of late, the wish of making fully known what exists has greatly increased. The transactions of the Archæological Institute, up to 1846, are now completed; and the continuation will appear conjointly at Rome and Paris.—Cavaliere Canina laid before the society his work on the antiquities of *Veji*,—once the rival of Rome, whose ruins are not considerable, still sufficient for fixing the locality, and appreciating the importance of this old city. Dr. Braun made a report on the excavations on the western slope of the Palatine hill, executed by order of the emperor of Russia, and spoke of the discovery of a new square, adjoining the church of St. Theodoro, towards the forum, whose Travertino pavement lies in the same direction and on the same level with that near the Phocas column. The results of the excavations of Commandante Campane, near Cäre, proved very important. Vases have been discovered, which nearly attain the beauty and elegant style of those of Vulci.

THE BUILDERS' BENEVOLENT INSTITUTION.

On Monday, the 19th, as was briefly mentioned last week, a general meeting in promotion of the Builders' Benevolent Institution, will be held in the Freemasons' Tavern at one o'clock. The object is to establish a relief fund, to be applied for the service of subscribers' workmen, and to erect an asylum for the reception of decayed masters, their wives and widows. The advantages of the institution are to be entirely confined to those connected with the building trades, viz:— bricklayers, plasterers, slaters, plumbers, carpenters, joiners, masons, painters, glaziers, smiths, and paperhangers.

We have been blamed by some of our readers for not sooner urging the advantages of this proposed association; a little consideration, however, will surely convince them, that if we advocated projects submitted to us without full and satisfactory inquiry, the opinion of The Builder would soon be worth nothing. Now that we have made this inquiry, and find amongst those engaged in the formation of the society, Mr. Biers, Mr. Stephen Bird, Mr. George Bird (treasurer), Mr. William Cubitt, Mr. Nesham, and other respectable men, we are able, conscientiously, to call upon all persons connected with the building trades to give it their warmest support. Although, in affluence to-day, they may support it on purely philanthropic grounds, should to-morrow bring a reverse, they may find personally the advantage of their former good deeds. To Mr. Thomas Cozens, of Lisson Grove, the projector of the institution, considerable praise is due for much exertion in furtherance of it.

COLLEGE FOR CIVIL ENGINEERS AT PUTNEY.

On Monday, the 12th, there was a numerous assemblage of visiters in the hall of the College to witness the annual distribution of prizes. The Duke of Buccleuch presided, and was supported by the Earl of Devon, and others. The Rev. Morgan Cowie, the principal, in the course of his report (to which we may, perhaps, refer again at greater length), alluded to the increased stability of the institution, and the importance of its objects to the great interests of the country, in providing for the development of the various enterprises which are daily being started—railways, harbours, navigation improvements, improvements in the mode of building, cleansing, ventilating, and watering of towns—operations which required enormous capital and skilful management, and the assistance of hundreds of heads and millions of hands. He observed also on the importance of science as a guide and auxiliary of the merely practical branches of engineering, ascribing the number of recent failures in bridges, &c., to the neglect of that portion of their art by a large number of engineers, who, he believed, did not know the laws that regulated the results they witnessed in the course of their professional experience, and who, therefore, were apt to generalise falsely in their opinions, and apply to particular instances their general rule, without discriminating sufficiently between the data. He considered it a matter for serious consideration by her Majesty's Government, whether or not engineers, to whom is now entrusted the lives and property of her subjects, should be allowed to exercise their valuable and important profession without some guarantee to the public of their competency.

Reports by Professor Davies (geometry), Dr. Lyon Playfair (chemistry), Professor Ansted (geology), Mr. Hodgkinson (geodesy), and others, were read, shewing satisfactory progress on the part of the students, and setting forth their own views as to the future.

Mr. Ranger, the professor of civil engineering and architecture, suggested in his report, that when Government inquiries into the causes of failures be made, the facts and particulars should be transmitted to the college for consideration. He alluded with great satisfaction to some essays "On Building Stones," which had been submitted by the students in competition.

The following is a list of the prizemen:—

Mathematics: Class 1, Porter and Simpson; Class 2, Coghlan and Oakes; Class 3, Campbell and Briscoe.—*Chemistry:* Class 1, Crump; Class 2, Thompson.—*Geology:* Porter.—*Geodesy:* Class 1, King; Class 2, Christie and Matheu; Class 3, Arvide; Class of Military Surveying, Heycock.—*Civil Engineering:* Class 1, King; Class 2, Ackland; Class 3, Cato and Kershaw.—*Architecture:* Class 1, Clarke; Class 2, Bennett; Class 3, Cato.—*Machinery:* Class 1, Batley and Cook—Drawings, Cook; Class 2, Coghlan—Drawings, Coghlan; Class 3, Campbell—Drawings, Campbell; Manipulation, Baldwin.—*Free-hand Drawing:* Christie.—*Linear Perspective:* Campbell.—*French:* Class 1, Porter; Class 2, Robertson.—*German:* Class 1, Calvert; Class 2, Whichello.—*Essay on Coal-Workings, &c.:* Codrington.—*Essay on Building Stones:* King.

Many others received honourable mention.

The workshops were then visited, and the drawings of the students inspected.

A long range of additional chambers and studies has been recently erected, under the direction of Mr. Little.

ST. ALBAN'S ARCHITECTURAL SOCIETY.

On the 17th instant the second anniversary of the St. Alban's Architectural Society was held in the town-hall, the Earl of Verulam in the chair. The report of the council having been read, which stated that a general meeting of the Society will be held in Hertford on the 11th of August next, the Rev. C. B. Pearson read a paper on the late restoration of nine parish churches in the northern part of the county, detailing the manner in which the works had been carried on.

Dr. Bromet drew the attention of the meeting to the use of common varnish, for the refreshing of decaying frescoes, and of its assistance in deciphering obscure inscriptions. He also exhibited a fac-simile of an inscription in an unknown character recently discovered in the tomb of a knight-Templar, and dwelt strongly on the propriety of copying and so preserving all inscriptions, however ancient their character, or obsolete their language, alleging, that although now unintelligible, a key might one day be found which would unlock their whole mystery, and lay open to us knowledge hitherto unthought of.

Professor Donaldson read a paper on "Basilicas, the early Christian churches of the Roman empire."

Mr. Boutell read a paper written by Mr. Laing, jun., on the principles of Norman architecture, the author of the paper at the same time elucidating the subject by referring to a series of drawings which adorned the walls.

Mr. Chambers, in seconding a resolution, said,—"We did not pry into antiquity to be buried beneath its dust. No, we explored its traces, we investigated its remains that we might imbibe its spirit, that we might appropriate, and apply to the more useful and practical mind of the present day, all that we there found of graceful and noble, thus refining, adorning, and elevating an age, which, but for that, might be degraded into the sordid and self-seeking. There was in the mind of man a natural feeling of reverence for what was ancient. We looked with interest at an old tree, or an old stone, merely because we knew it had stood in its place for centuries. An old house was an object of increased interest, as it awakened thoughts of the domestic life of our ancestors; a building dedicated to civil purposes, to the administration of the laws, to the furtherance of the ends of justice, demanded a yet higher degree of regard; but one consecrated to sacred purposes, where man had met his fellow man, to worship together their common Creator, exacted our highest respect and sympathy."

NEW ITALIAN OPERA HOUSE, COVENT GARDEN.

The production of "Anna Bolena" at the new house (a noble performance) is distinguished by some capital scenery by Grieve, worthy of note, particularly the interior of a gorgeous Tudor hall, which is excellently well painted. If the main arches were the obtusely pointed instead of semi-circular, we should be without an objection. The scenery in some of the recent *Divertissements*, and the artistical groupings, call for praise.

In respect of sound, in this building, Mr. Albano's arrangements have been most successful, every note is heard, pure and distinct.

THE VICARS' CLOSE, AT WELLS.

THE VICARS' CLOSE AT WELLS.

The annexed engraving is a restored representation of the exterior of the hall and staircase, and two of the dwelling-houses, at the southern end of the vicars' college or close, at Wells, in Somersetshire. This establishment originated in the year 1237 with Bishop Joceline de Welles, who first ordained the chantry priests attached to the choir of the cathedral, under the title of vicars choral. Bishop Ralph de Salopia, or Shrewsbury, in 1347 considerably enlarged the original establishment, and added several buildings, parts of which, including the two two-light windows, shewn in the engraving, over the entrance gateway, are still visible. Subsequent benefactions were bestowed and additions made, the principal of which were the erection by Bishop Beckington about the year 1450, of the Close hall-gate or chain gate, which crosses the public road, over which is a corridor or gallery communicating with the vicars' common hall, and terminating at the opposite end in a staircase which descends into the north transept of the cathedral. The buildings are thereby attached to the church, and the architectural features of this ingenious arrangement are alike exceedingly interesting and beautiful.

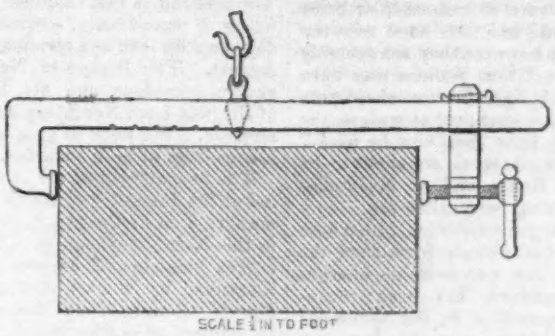
Beckington's three executors, Richard Swan, Hugh Sugar (illustrations of whose chantry in Wells Cathedral are given in Vol. IV. of The Builder, p. 102, and 114), and John Pope, *alias* Talbot, fulfilled the directions left behind him of applying the residue of his property "to pious uses," by entirely rebuilding, as is supposed, the vicars' dwellings. At the Reformation this establishment, though considerably reduced, escaped the fate of other religious foundations; and in the twenty-fourth of Elizabeth a charter was granted, constituting it a corporate and politic body, entitled, the Principals, Seniors, and Vicars Choral of the Choir of the Cathedral Church of St. Andrew at Wells, with the privilege of a common seal; restricting, however, their number to not less than fourteen, nor more than twenty. The vicars' dwellings, forty-two in number, are on the north side of the cathedral, and form two sides of a court, the north end of which is occupied by a chapel, with a library over, and at the south extremity communicating, as above stated, with the cathedral. They are most interesting examples of English domestic architecture of the fifteenth century. The houses have gardens in front, divided by low walls; and each garden has a porch at the entrance. On every chimney-shaft the several rebuses of Beckington's executors are successively introduced within a panel, under the arms of the see and those of Beckington, alternately.

The oriel shewn in the engraving, and one corresponding with it on the opposite side of the hall, are of later date than the other portions.

It is to be wished that the desire of rescuing from oblivion the traces of our forefathers' pious zeal and architectural skill, which happily characterizes the present time, and of which the signs are, we may hope, becoming increasingly evident, may manifest itself in the case of these unique and interesting buildings. Modern vandalism, it is deeply to be regretted, has well nigh obliterated their original features, and the little that remains to tell of the past is rapidly hastening to irrecoverable decay. May it not be too late, however, to hope that amid the interest now so much manifested in the preservation of the architectural mementos of the mediæval period, the vicars' college at Wells will not be forgotten.

F. T. D.

A STONE-LIFTER.



A STONE-LIFTER.

Sir,—Being engaged in the construction of bridges, &c., on the Great Grimsby and Sheffield Junction Railway, and the engineers objecting to lewis-holes in the face of the coping, Mr. Joshua Oliver, clerk of the works, suggested a plan to obviate the difficulty. The annexed sketch is a representation of the apparatus, which is nothing more than a bar of iron, 3½ inches wide and ¼ an inch thick, with a sliding piece and screw; but should it be used for rough stones, the screw may be dispensed with by adding a key to the top of the sliding piece, as shewn by the dotted lines.

Thinking it might be useful to other parties, I obtained the sanction of the inventor to forward it for your valuable and most useful paper, hoping you will not deem it unworthy of a corner.—I am, Sir, &c.,

An Old Subscriber.

Morton Gainsbro'.

DEE BRIDGE.

Sir,—I perfectly agree with your remarks respecting the fallen bridge over the Dee at Chester, but though I have given close attention to all the reports, evidence, opinions, &c., as they have successively appeared, I think there is one peculiarity in the structure of this bridge, the effects of which have not been duly estimated, nor, as it appears to me, clearly understood.

I allude to the curvature of the rails over the bridge. I am aware that General Pasley stated, "though he knew of no other iron-girder bridge passing on a curve, yet the curve was so slight that it was scarcely worth mentioning," &c. Also that Mr. Stephenson, in his report, has estimated that the lateral strain from this cause would only be about 750 lbs. But these adverse opinions have not shaken my belief that the curvature of the line had considerable effect in producing the fall of the bridge, and I think nothing can shew more plainly the folly of pinning your faith on great names than this accident, and the subsequent investigations.

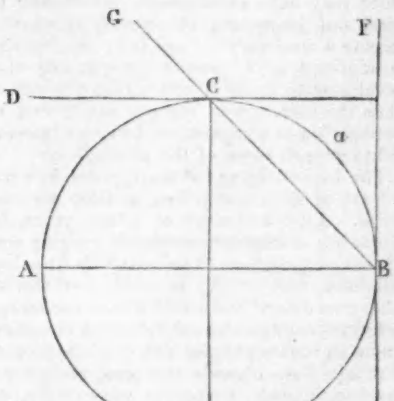
It is a matter of first importance to arrive at just conclusions in a question like this, as improved experience can only thus be obtained, and this is the only beneficial result that can arise from such a calamity. I trust, therefore, you will excuse a little prolixity in my endeavouring to make clear this point.

The curve in question had a radius of two miles.

In the following diagram, let ABC be a circle of four miles in diameter, and the portion B*a*C a quadrant of that circle, and consequently a curve with a radius of two miles. Let EB be the direction of any moving mass. Draw a straight line from B to C and produce it towards G. Produce EB also towards F, and draw CD perpendicular to EF.

Suppose a mass with uniform motion, and having an impinging force of 200 tons moving from E towards F. To arrest this motion at B, or turn it at right angles in the direction BA, it will be requisite to have a power at B capable of sustaining an impinging force of 200 tons. But if instead of arresting the motion at B, it is only required to divert it in the direction BC, half this force will be sufficient; for it is an established law, "that every change of motion must be proportional to the impressed force, and the converse;" and it is obvious, from an inspection of the figure, that a deflection in the direction BC would be just in the mean between its true course and one at right angles, to direct it to which the full impinging force would have to be sustained.

The same power would be required at the point C, if the mass be supposed to be moving from B towards G, and it is required to be deflected at C, in the direction CD, for the angle of deflection is the same as at B. It appears, therefore, that to divert a moving mass from one direction to another direction at right angles, its full impinging force must be sustained.



This is precisely what is accomplished by a railway curve, and as it is an axiom that like effects are produced by like causes, it follows, that though the mass moving from E towards F, be deflected at B along the curved line B *a* C, the same power has to be exerted, for just the same effect is produced on the mass, as if it had been deflected at B, in the direction of BC, and at C in the direction CF. There would, however, be this difference, instead of the deflecting power being required at only two points, B and C, it would be required to be distributed along the whole length of the curve.

By this theory therefore, if the length and curvature of the line and the impinging force of the moving mass be known, it is easy to determine the lateral pressure upon each lineal foot of curvature. In applying it to the case in question, I assume that the weight of the engine and tender is correctly stated at 33 tons and the velocity at 30 miles per hour. The radius of the curve being two miles, the length of a quadrant curve would be about three miles, and though it might be difficult to determine the exact amount of impinging force, an approximate amount may easily be arrived at; impinging force being proportional to the velocity and gravity of the moving mass.

Thirty miles per hour is equal to 44 feet per second of time, and 33 tons moving at the rate of 44 feet per second, would be equivalent to 44 times 33 tons moving at the rate of 1 foot per second. This again would be equivalent to 12 times this amount of gravity or weight moving 1 inch per second, and this again to 4 times this amount moving one-fourth of an inch per second. 33 tons × 44 × 12 × 4 = 69,696 tons. But the impinging force of a body in motion let the motion be ever so slight, is greater than an equal body at rest; therefore the impinging force of 33 tons moving at the rate of 44 feet per second, is greater than 69,696 tons. We cannot consequently over estimate it, if we take it in round numbers at 70,000 tons.

It has been before shewn, that to divert the motion of the mass from the direction of one straight line to the direction of another straight line at right angles to it, its whole impinging force will have to be sustained. A quadrant curve of three miles in length, therefore, with a weight of 33 tons moving at 30 miles an hour, would have to sustain a lateral pressure of 70,000 tons distributed over its entire length. This would amount to 4½ tons per lineal foot nearly, and as the bite or hold of the flange of a driving wheel 5 ft. in diameter would be about 1 foot, there would be a constant and continuous pressure of 4½ tons. This is for the engine and tender alone. Every attached carriage would be under the same influence, and exert a pressure in proportion to its weight.

The weight of the attached train was about equal to that of the engine and tender, the lateral pressure would therefore be equal, and this will give an aggregate continuous pressure of about 9 tons.

This calculation is without allowing any thing for the pressure arising from the action of centrifugal force; which, as it would disturb the centre of gravity and throw it outwards, would increase the lateral pressure, though from the great radius of the curvature, in only a small degree. The action of centrifugal force, however, would have this important effect: it would throw the whole of the lateral pressure arising from the tendency of bodies in motion to persevere in a straight line, and which we estimate, as before shewn, at 9 tons, upon the outside line or rail of the curve, and consequently upon the outside girder of the bridge.

I take Mr. Kennedy's estimate of 70 tons on the centre as the correct breaking weight, for it is about the mean of the different estimates; and supposing the estimate of the permanent load on the girder, as furnished by your correspondent on the spot, to be also correct, it is equivalent to 28½ tons placed on the centre. This added to 33 tons, the weight of the engine and tender, and to 9 tons, my estimate of lateral pressure, will give 70½ tons, which is half a ton over the breaking weight. Again, Mr. Kennedy's estimate of 70 tons is on the assumption that the girder was in its proper vertical position, which, from the observation of your correspondent, that some of them yet remaining are as much as 1½ inch from this position, is very doubtful. In fact, the constant action of this great lateral pressure would have a tendency to disturb the vertical position of the girders, by straining and lengthening the tie-rods; and, in reply to Mr. Stephenson's argument, that greater weights moving with greater velocity had passed over this bridge with safety, I would observe, that this was when the entire structure was in its integrity, and before it had been weakened by constant straining.

In the case of the three engines, the weight would be about 100 tons, and the lateral pressure arising from the cause I have been endeavouring to explain, twenty-seven tons if they moved with the same velocity; but if the velocity was greater, the lateral pressure would be proportionably greater, and might possibly amount to forty tons. This great lateral pressure acting simultaneously with the vertical pressure would resolve, and manifest itself in the line of least resistance, and both a deflection of the girder and a great strain upon the transverse tie-rods would ensue, and it is not improbable that the tie-rods would occasionally be stretched, and thus allow the girder to deviate from its true vertical position, and thus become weaker in proportion as the deviation increased.

That the curvature of the line had to do with the deflection of the girder is further made evident from the fact, which was clearly proved in the evidence, that with every increase of velocity in the passing train there was a corresponding increase in the deflection

of the girder. If the line had been straight, the very contrary would have been the case. Every school-boy knows that he can with safety slide over a piece of ice he dare not stand upon; and that a heavy ball may be rolled over a substance which it would break if placed on its centre. *Velocity decreases vertical pressure*, and a velocity may be conceived by which vertical pressure would be entirely destroyed. A ship in rapid motion draws less water than when at rest. How then is the increase in the deflection of the girder caused by an increased velocity to be accounted for, if the curvature of the rails only caused a lateral pressure of 750 lbs., as stated by Mr. Stephenson.

I come, therefore, to the conclusion that the curvature of the line over the bridge had a great deal to do with its ultimate failure, and I have heard of nothing in the course of the investigation which has shaken this opinion: if it be wrong, I should be glad if any of your numerous correspondents would set me right. GETA.

Liverpool, July 1, 1847.

THE GAS MOVEMENT.

PREPARATIONS FOR A BETTER STATE OF THINGS.

Not a week passes without some additional progress towards a reduction of the anomalous state of prices to their destined level, as a prelude to the vastly increased diffusion of this noble element of modern comfort and convenience, amongst the domiciles of every class of the community, not only as a cheap and plentiful substitute for the light of day, but as a substitute for the ruder and more cumbrous sources of heat in its application to domestic purposes in general. And even the privileged because the common-good establishment at Manchester, by the profits of which so many magnificent public improvements have been already carried into effect, seems now determined not to be surpassed in the movement towards the diffusion of such a boon as cheap and good gas to every class even of those already otherwise so nobly benefited. From 24th ult., the prices at Manchester have been further reduced to 5s. from consumers of small quantities, and 4s. 6d. from consumers of large quantities; and doubtless as domestic consumption increases, further reductions will lead to further diffusion; and we rejoice to perceive that many of even the monopolist companies seem to have now resigned themselves to a movement onwards with the stream of such a more or less rapid or gradual, but at all events certain, reduction. The Devonport Gas and Coke Company, for instance, in announcing a reduction of price from 6s. to 5s. per 1,000 cubic feet, and recommending the more general adoption of gas for domestic purposes,—towards which, by the way, it has organized a system likely to be efficient, namely, the supply and fitting up of every requisite in private dwellings, for heat, no less than for light, at their own expense, and for a mere annual charge of 7½ per cent. on the net cost of the fittings,—go on to observe, that as the demand for gas will be greatly increased as it is brought within the reach of all for general use, so in proportion to the increase of consumption will it be in the power of the directors [in their inclination, and for their increased advantage, it ought to have been] from time to time to lower the price of their gas, and thus to render its use still further economical to the public."——Following a little further in the wake, but still all actuated by the one grand movement downwards in price—but upwards, we will venture to say, in prosperity—other companies are ever and anon displaying an inclination, however futile, because insufficient, to benefit both the public and themselves. At Dorchester, for instance, a recent announcement of a further reduction to 6s. 8d. per 1,000 cubic feet was lately made, and it now appears that while the company there is "probably in a more flourishing state than most others," their gas is not only beginning to be used in the churches and chapels, hotels and public houses, shops and warehouses, but that it is penetrating into drawing-rooms and parlours, bedrooms, passages, and kitchens, cellars and stables.——At Penrith, the company have reduced thei prices at one sweep, as well they might even for their own sake, from 10s. down to 7s. 6d.; and it is to be hoped that the result will shortly induce them to repeat so bold a step with confidence, increasing with the increase of demand upon their mains.——The company at Wells were to reduce their price to 8s. on 25th ultimo; and they have now the confidence to which however they are scarcely yet entitled, to hope "that persons who have not hitherto used this light for household purposes will find it the cheapest as well as the cleanest and safest light that can be used."——Gas works, we observe, are about to be erected at Alton, Hants, and at Needham-Market, tenders having been called for.

The Southampton gas consumers' bill, whose threatened success had already frightened the old company into less unreasonable charges and more civil conduct, has been meanwhile adversely disposed of by the Commons committee; the existing company, however, being put under terms to submit to a Parliamentary obligation, not to exceed six shillings as a maximum charge to private consumers, and also to conform to the reduced scale for public lights according to the model rate. So far, therefore, even in the midst of the temporary defeat of wholesome competition, the old company have no great reason to triumph in the compulsory adoption of the check suggested by THE BUILDER, though as yet but leniently applied. "The adventurous promoters," however, as the *Hampshire Independent* remarks, "have done a service to the town, which the committee has taken care to exhibit accompanied by a martyrdom; warning all against the danger to themselves—whatever may be the good to others—of attempting to promote beneficial competition. The danger of the precedent here laid down is obvious. This is not an age when men choose to become martyrs for the public good. Yet martyrs they must necessarily be, if the very success which they have experienced, in reducing the price and improving the quality of what has become a necessary in any town or city, shall be admitted as a ground for refusing them permission to enter on the actual competition, when the mere dread thereof has forced the monopolists to compromise their own interests, and to consult those of the public."

The days of the age of martyrdom, however, at least of such martyrdom as this, are numbered. After a struggle of fifteen years, Mr. Hume has at length succeeded in purging committees on private as on railway bills from local members, and so the promoters of this and other consumers' companies will be encouraged in future attempts to establish, in all directions, a new and more popular and economical order of things. As regards the local company in question, indeed, it appears accordingly, that they are by no means disposed to abandon their project; but that, on the contrary, they design to recommit their bill, as doubtless many others will do, in the forthcoming Parliament, to the judgment of disinterested members, selected because they are unconnected with the locality on whose best interests they are to be called on to adjudicate. Even in the past session, however, in cases such as that of the Wakefield rival companies, although they agreed to a compromise, they were very significantly informed, that "the satisfaction of the parties immediately concerned would not alone be accepted as a ground for legislative acquiescence; and that in all such cases the public interests, as well as of the parties, should be duly protected.

BUILDING IN ALGIERS.

THE extent to which building is going on in Algiers, is scarcely understood in England. This country is associated in our minds with little but barbarism, Christian slaves, and bombardments; and we are scarcely prepared to hear of a cathedral, churches (some for Protestants), abattoirs, schools, covered markets, banks, custom-houses, &c., on which many thousands of pounds sterling have been expended by the French. Yet such is the case, and the erection of private houses keeps pace with the constant increase of the population. In the mixed or Arabian districts of the three provinces, no less than 842 private houses have been built, the value of which is estimated at 176,000*l.*; besides 38 industrial establishments, estimated at nearly 9,000*l.* more.

THE ARCHÆOLOGICAL INSTITUTE.

LAST week we mentioned the arrangements which had been made for the meeting of the British Archæological Association at Warwick. The meeting of the Institute at Norwich will follow it immediately, commencing on Thursday the 29th inst. and terminating on the 4th of August. The Bishop of Norwich will act as general president, and Mr. Hallam, the Dean of Ely, and Lord Northampton, as presidents of sections. We hope to give full reports of the proceedings of both societies.

The new number of the *Archæological Journal* of the Institute* contains much interesting matter. The first paper, "Architectural Notes in the Neighbourhood of Cheltenham," embraces a number of curious parish churches, illustrated by 18 wood-cuts and etchings. St. Mary's Church, Nun-Monkton, Yorkshire, the subject of another paper, with 11 excellent illustrations, belongs to the end of the 12th century, and was begun in the transition Norman style and finished in the pure Early English: "The west front is of very singular design, and particularly elegant. It is remarkable for the curious and very ingenious combination of a tower and high pitched roof in one design. If the tower were removed, the front would present a gable with a pitch of sixty degrees, thus forming an equilateral triangle on the side walls. On the point of this gable is placed the parapet of the tower, the west side of the tower itself forming part of the gable, and the other three sides being included in the church."

NOTES IN THE PROVINCES.

BESIDES the burning of a number of buildings at Greenwich by lightning during the late midnight storm, considerable damage has been done in various other quarters. Around Kennington, several buildings were much injured, and the district church of St. Mark, facing the common, was considerably damaged, and the building shaken so as to stop the motion of the clock.——A plan and estimate for building the new barracks at Gosport for the Portsmouth division of Royal Marines, have, by direction of the Admiralty, been drawn out and submitted by Captain James, the officer of Royal Engineers in charge of naval architectural works.——The restorations of the Abbey Church at Romsey, are at length so far completed that the re-opening will take place on the 21st instant.——On Tuesday week the new church of St. James, erected at Beal Hey, Shaw, Crompton, was consecrated.——Trevethan new church, Monmouthshire, was consecrated on Thursday week.——The town-hall committee, says the *Birmingham Journal*, have instructed Mr. Edge, their architect, to sell and remove the old materials on property near the town hall; to prepare an estimate of the expense of completing the town hall according to the original design; and to apply to the owners of quarries in Anglesea as to a supply of stone. This had been done, because it took twelve months before any stone could be prepared for the purpose.—— The mastership of the Manchester School of Design has been conferred upon Mr. A. D. Cooper, son of Mr. A. Cooper, R.A.——On Thursday week, the corner-stone of the extension, or south wing of the Manchester Royal Infirmary, was laid.—— Another omen of the *fall* of markets, and of those who have hitherto so successfully screwed them up to famine prices, and refused to sell of their superabundance even at these, has just occurred at Liverpool, in the fall of another heavily stored granary from the immense pressure within.——Upwards of 10,000*l.* worth of the land laid out for villas at Eastham, says the *Liverpool Albion*, was brought to the hammer on Tuesday week, and fetched high prices, ranging from 4s. 6d. to 6s. 9d. a yard, principally for terrace lots.——Some of the land bought at Birkenhead at 4d., has sold at 4*l.* 4s. per yard.——The bricklayers and labourers of Derby have struck for an advance of 2s. each per week, or 24s. for the former and 15s. for the latter.——The old oak stalls, which formerly belonged to St. Mary's Church, says a Nottingham paper, though they were smashed down in the most wanton manner, and actually offered for sale at all the curiosity shops, and

* No. 14, for June. Published at the Office of the Association 12, Haymarket; Murray; Longman, &c.

ultimately sold for 10*l.*, have fallen into good hands. They have been 'skilfully restored by our townsman, Mr. Stokes, and erected in the chancel of St. Stephen's Church, Snenton,' for the use of the choir. They were replaced at St. Mary's by the flimsy deal pews that now fill the chancel.——The contracts for building the new church at the Bank Top, Darlington, have been entered into, and we believe the works will be proceeded with without delay. The contractors for the stonework are Messrs. Anderson, of Richmond; for the woodwork, Mr. Robert Elwin, of Darlington; and for the plumber's work, Mr. William Russell, of the same place.——The erection of the new church of All Saints, Monkwearmouth, is about to be promoted by the profits expected from a local 'bazaar of useful and ornamental needlework,' connected with which commendable project we observe the signature of 'Emma Kennicott, secretary,' appended to a business-like advertisement of time, place, &c.——There is a report, says the *Albion*, that her Majesty will visit Ireland this month and preside at the ceremony of laying the foundation-stone of the Queen's College, Belfast; but the condition of Ireland and her Majesty's arrangements render this very unlikely.

NOTES ON FOREIGN AFFAIRS.

The public works department at Paris has just published a statement relative to the works executed in monuments and public edifices during 1846, from which it appears that the credits opened were 9,942,931f. 80c.; the sum disbursed was less by 4,878,209f. 45c. The works of the Abbey of St. Denis are very far from being terminated. The Palace of the Institute will be finished in 1847. The Sainte Chapelle will require new credits. The projected works in the Chamber of Peers will only be finished in 1849 or 1850. The Ecole des Mines will require new credits. At the Ecole Royale des Beaux Arts only the masonry of the amphitheatre of anatomy has been done. The extensive works at the Bibliothèque Ste. Geneviève will be terminated in 1850. The repairs of the palace of the Chamber of Deputies will be concluded this year. Various other Government offices and other works are in progress towards completion between this time and 1850.——The inauguration of the statue of Frederick the Great at Breslau, took place on the 27th ultimo, in presence of the King and Prince of Prussia.——A Frankfort letter in the *Cologne Gazette* of the 6th repeats a rumour already in circulation, of the Emperor of Russia having offered to lend fifteen or even twenty millions of roubles to the King of Prussia, to enable him to promote the completion of the railway to the Baltic.——The foundation of the first German Catholic church ever built in Prussia has been laid at Leignitz, in Silesia.——The picturesque village of Lichtenberg, says a letter from Glarms, was devastated, by the bursting of an avalanche on 18th or 19th ultimo.——The Municipality of Hanover has just contracted a loan of 300,000 thalers (1,200,000f.) for building a new theatre which, it is said, is to surpass in magnificence most of those that exist in Germany.——A few days ago the first stone of the works of one of the gigantic steam-engines destined to drain the lake of Haarlem was laid.——The tower and steeple of the church of Nogent-le-Bernard (Sarthe) fell in some days ago with a horrible noise, and in their fall destroyed almost all the edifice. No one was injured. The church bell, though it fell upwards of 100 feet, sustained no damage.——We learn from Constantinople, that the palace being built by the Viceroy of Egypt, at Beycos, will be of the finest stone that can be procured, and adorned with 150 marble columns.

Sale of Property by Auction.—Caution.—In the case of Robinson *v.* Wall, the printed conditions of sale having stated that the property would be sold *without reserve*, which means that "no person will be employed to bid in behalf of the vendor for the purpose of keeping up the price," whereas an arrangement existed which would have prevented a sale under a certain amount; the Lord Chancellor has decided that the purchaser can not be called on to complete.

BUILDERS' TENDERS.

We continue to receive many statements of lamentable differences between tenders for work delivered by builders. One correspondent, who signs himself "A Surveyor," attributes the mistakes in many instances to errors in moneying alone.

We give below a few recently delivered tenders:—

London Orphan Asylum.—Tenders for alterations to the chapel, sundry repairs, and painting, whitewashing, &c. Mr. Arthur Ashpitel, Architect.

Jay	£861 0
Trego	800 0
Lawrence	780 0
Holland	746 0
Treharne	642 15
Barber	587 17

The quantities were taken out by Mr. Meakin.

For repairs to be done at No. 26, Frith-street, Soho, Mr. C. Foster, architect.

Simes and Son	£338 0
Woodcock and Son	320 0
Bodger	165 0
Lloyd	147 0
Brake	146 0
Bugg	140 0

Holborn and Finsbury Commission.—Bunhill-row, St. Luke's: length 1,370 feet.

Batterbury	£1,250 0
Yeoman	1,034 0
Ward	955 0
Jay	917 0
Dethick	911 0
Hill	873 0
H. Johnson	774 0

Cross-street and Wilderness-row: length 850 feet.

Thos. Ward	£722 0
Yeoman	697 0
Jay	644 0
Dethick	635 0
Batterbury	628 0
Hill	627 0
H. Johnson	574 0

LODGINGS FOR THE WORKING CLASSES IN GLASGOW.

"The Glasgow Association for establishing Lodging-houses for the Working Classes," has opened its experimental establishment. According to a Glasgow paper, the house, which has been fitted up for this purpose under the direction of Mr. James Wylson, architect, comprises four stories, thus affording facilities for accommodating separately the three classes of inmates, who in such places must be provided for, namely, single males, single females, and married couples, leaving the ground story to be appropriated to the dieting department. It has accordingly been thus arranged,—the three upper floors as dormitories according to this classification, and the ground floor as a day-room, divided by low partitions into corresponding compartments for the use of the lodgers during the day, and in which they may take their meals. For economy of space, the dormitories have been fitted up with two tiers of berths, after the manner of passengers' cabins on ship-board, excepting that the upper and lower berths are entered from opposite sides; thus, though rendering more standing room necessary, accomplishing the complete separation which is essential in houses of this description. Each berth is furnished with a seat, and is inclosed by a door, in order to secure the clothes and other property of the occupants; and each dormitory is provided with a water-closet, also a lavatory containing several wash-hand boxes, so that a small number may wash at one time. The kitchen and bar are combined, and are situated at one end of the ground story, separated only by a counter from the seated portion forming the day-room. Here are provided the means of furnishing plain wholesome meals; and advantage is taken of the draught in the furnace, which heats the coppers, for ventilating the dormitories above; this is effected by means of an upright shaft of tin tubing, which communicates with each floor, and leads into this furnace, so as to become mainly the source of its supply of air, while it is the medium by which the vitiated atmosphere of the several floors is drawn off downwards. In the present case the downward mode of ventilation happened to be the most available. Arrangements are being made for fitting up, in the rear of the premises, one bath for male and another for female lodgers.

THE VALUE OF DESIGN.

At the distribution of prizes in the Glasgow School of Design, on the 1st instant (Sheriff Alison in the chair), Sheriff Bell said, in the course of an excellent speech, that "a sum of no less than 5,000*l.* is annually paid by persons engaged in various pursuits in Glasgow to parties in France for designs; so that (he continued) there is not only a wide field of competition around us, but there is the fairest prospect of success in a worldly or mercantile point of view to the man or woman who devotes the requisite time and study to the acquisition of the arts of design. There is no fear of such persons failing to assume a respectable position in society and obtaining a decent income. This, of itself, is a consideration of very great importance to the pupils. Next session it is proposed to arrange a room in which visitors who cannot attend regularly as pupils shall be permitted to study at certain hours of the day. I have no doubt that calico printers and others would find it profitable to devote some hours a week to study; and the arrangement proposed will not interfere with those students who come daily, while its effect will be to open up something like a small British Museum of useful art in Glasgow, which may ultimately be of great consequence. I think we may, without the indulgence of vanity or enthusiasm, look forward to the time when there will be a distribution of prizes in greater number, and still more useful than such as we are now enabled to award. It is now upwards of four hundred years since a most remarkable competition in the arts of design took place in the city of Florence, when the magistrates of that city determined to have for their baptistery a splendidly sculptured gate, and with this view announced prizes in all the principal cities of Italy. Artists came forward from all parts of the country with their designs for competition, and at length the number was reduced to three. Again the princes and magistrates assembled from great distances, and there was a feeling prevalent that amongst the works exhibited would be found something that would deserve to last for ages. Ghiberti and Brunelleschi, encouraged by this, produced their immortal works. Brunelleschi, an old man, behaving with the philosophy of one who had already won his laurels, and knowing that Ghiberti was a young man of only twenty-three years, resigned the competition, and declared that he himself voted for Ghiberti. A pannel from this work of Ghiberti's is now on the walls, executed by one of our own pupils. Ghiberti devoted forty years of his life to these gates; his labours have been the admiration of all the world, and Michael Angelo declared them worthy to be the gates of Paradise.

The Lord Provost said that Sheriff Bell had told them—what might well impress every one with the value of a school of design—that Glasgow merchants expended annually in France no less than 5,000*l.* per annum for their various establishments. He trusted that they would not much longer have to go there for designs to adorn their houses or their streets; but that out of the classes raised in this school, as well as from similar institutions throughout the kingdom, designs might yet be furnished worthy of our country. He was happy to see that her Majesty's Government were turning their attention to the encouragement of native art. He had noticed from the public prints, that a countryman of their own was to be employed in decorating the New Houses of Parliament, and who had recently obtained one of the prizes awarded by the Government. He meant Mr. Noel Paton, a gentleman who, like many of the pupils of the present institution, had been engaged in the mechanical arts. He begged to move a vote of thanks to Mr. Mc Manus and the other masters, for their meritorious exertions during the past year.

New Books.

An Inquiry into the Difference of Style observable in ancient Glass Paintings, with Hints on Glass Painting. By an AMATEUR. Oxford. Parker. 1847.

THIS work cannot fail to have a considerable effect on the beautiful art of which it treats, and should be carefully studied by all who are in any way interested in its progress or application. The antiquary, the artist, the glass painter, and the general reader, must alike admit the value of this book, which has made clear and consecutive what before was scattered and confused, and is evidently the result of many years of personal examination, study, and comparison. It is only occasionally that we feel called on to speak in such unqualified terms of approval as we do in this case.

It consists of two handsome volumes, the second of which is devoted wholly to illustrations. The first volume comprises, after matter introductory, with many valuable notes, five sections discriminating the styles, for the classification of which the author adopts Mr. Rickman's architectural nomenclature; viz., early English, the decorated, perpendicular, cinque cento, and the intermediate. These constitute the first chapter. The second chapter is divided into three heads, on the "Employment of painted glass as a means of decoration," "On the true principles of glass painting," and "On the selection of a style." In various appendices are given a translation of parts of the *Diversarum Artium* of Theophilus (an excellent translation of which in full, by Mr. Hendrie, we recently mentioned), and various illustrative extracts from other old writers.

The following observations on the means by which the age of particular specimens of the art can be ascertained, are from the introduction, and will be found interesting:—

"In few branches of antiquarian research will a knowledge of minute details, and the consideration of internal evidence, be found more important than in this. It is seldom that the age of a glass painting is determined by the direct testimony of a date affixed to it, or of written documents; nor can a safe conclusion always be drawn from the situation which it occupies. It might at first be supposed that the glass would not be older than the window in which it is found, especially when the principal divisions of the picture or pattern coincide with the apertures of the window; but the inference from this circumstance cannot be relied upon, since instances are known in which windows have been constructed for the reception of glass older than themselves. It is therefore only from the internal evidence afforded by the work itself, that the date of a glass painting can in general be ascertained; and this evidence is not, as in a Gothic building, presented by a few prominent features, the contour of a moulding, for instance, or the form of a window, but by a variety of minute particulars, no one of which is perhaps adequate of itself to decide the question.

Some of these tests are peculiar to glass paintings, such as those afforded by the nature and texture of the material, its colour, and the mode of painting it. Some, again, it has in common with other objects; such as the character of the drawing, the form of the letters, the architectural details, the costume of the figures, the heraldic decorations, &c. All these features are not equally trustworthy; those derived from the general practice of the day, as regards the manufacture of the glass, and mode of painting it, are more to be relied on than those afforded by the nature of the particular subjects represented.

Each period of medieval glass painting has its distinctive style of execution, but artists were at all times prone to copy the designs of their predecessors. This may serve to account for the occasional representation in a glass painting, of the armour, costume, and architectural features of a period anterior to that of the work itself.

I shall now endeavour to shew more particularly the value of certain tests of date.

Mere *general arrangement* affords scarcely any criterion of date. The "*medallion window*" is perhaps confined to the Early English period; and designs extending themselves into more than one lower light of a window, can hardly be said to be earlier than the Decorated. But with these exceptions, almost every late arrangement is to be found more or less developed in the earlier styles.

The *general appearance* or *effect* of a glass painting is a feature deserving the utmost attention; but taken alone, it affords only a sure proof that the work belongs to some general period, without conveying a more definite idea of its date. The general effect of a glass painting depends indeed almost entirely on the quality and texture of the glass employed in it. Hence it varies according to the progressive changes in the manufacture of that material.

These, as might be expected, were so slow and gradual, as to be hardly perceptible; and glass, apparently of the same quality, was therefore employed during long periods of time. Owing to this circumstance, it becomes impossible to pronounce with certainty whether, for instance, an early glass painting, judging only from its general effect, is of the Early English, or early part of the Decorated period; whether another is late Decorated, or early Perpendicular; or whether to a third should be assigned a less general date than the space of time between the beginning of the fifteenth century, and the end of the reign of Henry VI., &c.

The execution of a glass painting according to any particular mode, the first invention of which is capable of being ascertained, raises a conclusive inference that the work cannot be earlier than a certain time; but seldom affords any other criterion of its date. So the representation in a glass painting of different ornaments, costumes, armour, and architectural details; the symbols of the alliance of families, or of individuals holding particular offices, serve in like manner to limit the antiquity of the work; without, however, at least in the generality of cases, setting any precise bounds to its lateness. Thus, for instance, the existence of the *yellow stain* in a glass painting, is a proof that it is not earlier than the fourteenth century. In like manner, a glass painting which exhibits *stippled shading*, or ruby glass having some of its coloured surface purposely abraded, may be pronounced not to be earlier than the fifteenth. Again, the use of *enamel colours* marks a glass painting as having been executed after the middle of the sixteenth century, while the trifling circumstance that the glass has been originally cut with *a diamond*, will denote that another work is not earlier than the seventeenth century. The representation in a glass painting of Decorated windows with flowing tracery, is an evidence that the picture was not painted until after the introduction of this feature in architecture. And the appearance of a shield bearing the private arms of a bishop impaled with those of his see, will in general raise a presumption that the work was executed during his prelacy."

We again cordially recommend to our readers this very interesting "Inquiry into the difference of style observable in ancient glass paintings," and give praise to Mr. Parker, the publisher, for the beautiful manner in which it is produced.

Correspondence.

CARDIFF COUNTY HALL COMPETITION.

SIR,—Your columns have had repeated remarks and suggestions for the improvement of architectural competition, but how can it be expected that such can be the case when some architects (not all) are the first cause of it themselves, as for instance, at this present time. An advertisement appeared in your columns inviting architects to submit designs for a new county hall, &c., at Cardiff, Glamorganshire, when from 30 to 40 sent in designs, and only about six approached the building wanted. Now the fact turns out that an architect was employed to draw out an advertisement for the town council, he himself, in conjunction with others, having sent in designs embracing all the accommodation, &c., required (differing from the vague advertisement he had drawn out). I would suggest that the different architects who have sent in designs should apply immediately for their designs and for a fresh competition, and to be furnished with the detailed particulars, to be drawn up by some responsible and respectable person.

I remain, Sir, &c.,

ONE OF THE COMPETITORS WHO HAS NOT SEEN THE SITE.

BATTERSEA PARK BUILDING SOCIETY.

SIR,—Had your correspondent "A Builder" applied to us, we would have afforded him every information in our power. Ere this, he has been informed that the tender of Mr. Burtenshan has been accepted by the directors at their last meeting, July 8th.

The fact of the tenders being called by public advertisement, rendered caution on our part imperative, especially as the lower tenders were very much below our estimate 3,600*l.*, and the directors had reserved to themselves the right of accepting any tender. The directors meet but once a month, consequently a great deal of delay was necessary, in order that they should sanction our proceedings.

We furnish below the names of the parties tendering, and the amount of their tenders.

We are, Sir, your obedient servants,

THOMPSON AND MORGAN.

July 15th, 1847.

Costworth	£4,217
Cooper and Davis	4,200
Knible	4,140
Underhill	4,027
Todd	3,949
Mackrel	3,721
Burtenshan	3,500
Pilbeam	3,479
Sandon	3,280
Share	2,880

PLASTERING ON CLAY WALLS.

Sir,—Referring to my journal of July, 1816, I find the following note:—"Almost all the houses between Maçon and Lyons are of earth or pisé, built in chests about 6 feet long, 3 feet high, and 2 feet thick, a layer of mortar 3 inches thick between each course, and also at the ends of the blocks. The roofs project at the *ends*, as well as at the sides, which has a very good effect. The tiles are double; this was, probably, the origin of the beautiful ornament on the monument of Lysicrates at Athens, and which is supposed to have been placed upon all temples."

The "Young Architect" will find the projecting roof on both sides lends the best protection for his cob walls. My recollection is, that these were only white-washed, but my notes are silent. Let me advise the plastering to be as thin as may be. Your correspondent will find a full account of the working of pisé, by my friend Mr. Cresy, in a little work just published by Ridgway, "Cottages of Agricultural Labourers."*—I am, Sir, &c.,

York, July, 1847. AN OLD ARCHITECT.

Miscellanea.

A MODERN MIRACLE!—Shakspeare read "sermons in stones," but we doubt whether he ever dreamt of deriving a *rope* from the same source. And yet, if a "sermon," why not a "long yarn?" Modern ingenuity has not found it a thing impossible. A rope, nearly three miles long, now lies on the verge of the borough of Gateshead, which was the other day a stone in the bowels of the earth Smelted, the stone yielded iron. The iron was converted into wire. The wire was brought to the wire-rope manufactory of R. S. Newall & Co., at the Teams, near Gateshead, and there twisted into a line 4,660 yards long! It is, we believe, the stoutest rope of the kind that was ever made. It weighs 20 tons 5 hundredweights, and will cost the purchasers upwards of 1,134*l.* It is intended for the incline on the Edinburgh and Glasgow Railway, near the latter city. A rope of hemp, of equal strength, would weigh 33½ tons, and cost about 300*l.* more. It would also entail greater expense while in operation (owing to its greater weight) and would sooner wear out. Ropes of hemp, however, for some purposes, are superior to ropes of iron. The rope now lying at Messrs. Newall's is one of the greatest curiosities we have seen for some time. We were reminded whilst looking upon it of the boast of one of Shakspeare's fairy friends, that he could "put a girdle round the earth in forty minutes." Poor *Puck*, we thought, would have been in a sad pucker, if these twenty tons of iron rope had been handed over to him for a beginning! —*Gateshead Observer.*

* A useful brochure, "published with the hope that it may aid in promoting the comfort and the prosperity of the invaluable labourers of our country."—ED.

THE SCHOOL OF DESIGN.—The report of the committee on the School of Design, to which we directed attention in a recent number, has not greatly pleased the council. If we understand rightly, another committee has been appointed by them to confer with the Board of Trade; and Mr. Hamilton, until now an active member of the council, has resigned. We shall give next week, from the "Appendix to the Report," a letter from Dr. Cooke Taylor to Mr. Shaw Lefevre, on the nature and objects of schools of design, which merits consideration.

PROJECTED WORKS, &c.—Tenders have been called for by advertisement for the erection of the Sheffield Athenæum and Mechanics' Institute; a dwelling-house and offices at Cuckfield; a pair of semi-detached villas in Twickenham-park; altering and repairing a residence at Mitcham, Surrey; rebuilding schoolmaster's house at Reston, Coldingham; erecting school-room at Tipton; new farm onstead at Chirnside, Berwickshire; vicarage house at Polluxhill, Beds; fever-house at Melton Mowbray; several works of new battery at Portsmouth; sundry works at Portland breakwater, comprising earth-works, railways, and machine houses on inclined plane from quarries; erecting buildings required by Needham Market Gas Company; erecting gas works at Alton, Hants; extending sewers 1,150 feet in Tower Hamlets; supplying 2,000 feet run of Carline nose stone kerb, or Aberdeen, Cornish, or Devon granite berb, 12,000 feet superficial of 3-inch York paving, and 170 yards superficial of 6-inch granite crossings, all for the parish of Westham, Essex; also for maintaining permanent way and works of Maryport and Carlisle railway for three years, in three contracts or one; supplying a contractor with 100 tons second-hand, flat bottomed, temporary rails at Dumfries or a seaport near it; for a supply of 20 to 50 tons bar-iron, a supply of bars, rods, and sheets, of Stafford iron, zinc in sheets, gas-fittings, plate and other glass, &c., for the South Coast railway; and for 1,500 tons of malleable iron rails and — tons of cast-iron chairs for the Blackwall railway.

CESSPOOL DEPOSITS.—A correspondent, J. G. J., desires to know whether lime when applied to soil in a cesspool causes it to deposit or sink, and how it should be applied, and of what sort; as he cannot afford to have the pool emptied for some time, though it is to all appearance full. We suspect our correspondent inadvertently identifies with mechanical subsidence chemical precipitation, and these with condensation of substance. The addition of a considerable quantity of lime to a full cesspool might cause both a chemical precipitation and a mechanical subsidence of certain ingredients of the mass, although a chemical precipitation does not necessarily imply a mechanical subsidence; but even though both results should be accomplished, still it does not follow that the cesspool would be or appear to be the less full, but the contrary; for while the more solid or condensed portion would occupy the bottom, the more fluid would still not only fill up the remainder as before, but be probably further forced into overflow from the additional bulk of lime thrown in. Had our correspondent's object been the mere neutralization of the malarious odours or fixation of the volatile gases, his purpose might have been accomplished by stirring in, or intermixing, chloride of lime or quick-lime; but in a close and covered cesspool, we suspect that the curing of an overfullness by a condensation of matter thus produced, even were it proper or practicable to any considerable extent, would occasion as much trouble and annoyance as the emptying of the pool at once.

LIGHTING BY ELECTRICITY.—Mr. Staite's new patent electrical lamp is said to go farther than heretofore in rendering electrical light available for practical purposes, as so long desired. From a small battery power a comparatively large and steady as well as sustained light, is said to be thus produced. The inventor contemplates the application of his invention to several purposes, amongst which are telegraphing by flashes through coloured media and the instantaneous display of night signals of the usual colours for danger, caution, &c., at the required distances from the stations. Hermetically sealed, of course, under a glass, as long since suggested, this light would also be a great boon to miners.

PEEL ON RAILWAYS.—At the opening of the Trent Valley Railway, on the 26th ult., Sir Robert Peel said, in the course of an excellent speech:—"This day we are met to celebrate the completion of a work as part of a system which is probably destined to effect a greater social revolution than any invention since the art of printing was discovered. Without wishing to over-estimate the effects which railways will have, or to say one word not dictated by prudence, I believe that they will be for our good, and that they will promote the moral and social welfare, and advance the political security of the kingdom. Within a few months our persons will be carried along this railway, our bodies with the fleetness of the wind, and our thoughts, by the agency of the telegraph, with the fleetness of lightning. Gentlemen, let us hope that these combined influences will be for our good, by drawing closer family affections and facilitating the intercourse of life, while they tend to promote civilisation and the advancement of knowledge. As regards our political security, I believe that we shall not have cause to regret their construction. In a country like this it is impossible to do more than support a limited army; and, in the event of war, which may God in his mercy avert, we might be exposed to the most fearful consequences, for it is difficult yet to say what effect steam navigation may have on maritime warfare. Of this, however, I am sure, that railways would enable us to concentrate our limited forces on any point that might be required, and I have no doubt, then, that the spirit of Englishmen would enable them to combat successfully against any enemy, even if numerically superior, by being conveyed by this new element of transport without fatigue, and well provided with necessaries. Gentlemen, it is only by drawing closer the great metropolis of the empire with the great towns, each of which may be said to form a metropolis of their districts, and getting a cheap conveyance, if we are exposed to the rivalry of other countries, that we shall be enabled successfully to compete with them; but I have no fear but by means of railways, and increased facilities of intercourse, that we shall continue successfully to compete with them, and add to the prosperity of agriculture and manufactures. I also hope that the result of bringing closer the sister country to us by railways will be to increase its prosperity, and unite us in bonds of mutual good feeling, and strengthen in us all the loyalty and affection to our gracious sovereign."

THE NEW CHURCH OF ST. CUTHBERT, BEDFORD.—This edifice was consecrated on Thursday in last week. It is Anglo-Norman and cruciform. The nave and chancel, from east to west, are about 90 feet; the transepts, from north to south, about 65 feet. There are three entrances, the principal one being at the west end. At the intersection of the transepts, nave, and chancel, the tower is supported on massive pillars with carved capitals. The arches are carved with moulded chevron and billet moulding. The roof is framed, open, and boarded diagonally, stained dark oak, with moulded cornice at the foot of the rafters. The principal rafters form a circular rib, and are supported on columns, standing on carved corbels. The organ stands on a slight elevation at the south-west end of the nave, and the font on the opposite side; the pulpit is on the south side, at the juncture of the chancel with the nave and the transepts; and the reading desk, which, like the sittings, is open, stands on the north side, to correspond. On the right of the reader is the desk from which the clerk leads the responses. The organ-case, pulpit, communion-table with chairs, reading-desk, clerk's desk, and all the sittings, are of English oak, grown in Chicheley Park, and are all carved in the style of the building. The flooring of the nave and transepts is of plain stone from the Stagsden Quarries, but the chancel and the step at the communion rails are laid in figured encaustic tiling, by Minton, of the Potteries. The rising of the steps at the communion rails presents a continuation of the encaustic tiling. There are triple lights at the east and west, and also at the north and south ends. The east window is entirely glazed with stained glass. The whole of the stained glass is by Baillie, of London. The architect of the building was Mr. Woodroffe, of Bedford. The masonry was executed by Mr. Brown, also of Bedford; the carpenter and joiner's work by Mr. Craddock; and the carving by Mr. Pinkerton, at the Eccleston works, London.

ARCHITECTS' PROVISIONAL CHARGES.—In the Exchequer, last week, Messrs. Finden and Green, architects and surveyors, brought an action to recover from Alderman Johnson and Mr. Marriott, as members of the managing committee of the City of London Commercial Club, 102*l.*, a balance claimed for drawing specifications and plans, and for the superintendence of building work executed for the purposes of the club. In 1838 the club in question was projected by Mr. Finden. It was opened in 1840, and was carried on until the close of 1842, when it was given up. The services for which the plaintiffs claimed compensation were performed between the month of June, 1839, and the end of that year. On giving up the club the defendants and other members of it subscribed a sum of money, sufficient to pay 10*s.* in the pound to the creditors to whom the establishment was then indebted; that composition the plaintiffs refused, but they received on account 100*l.* in two payments, leaving the balance alleged to be due. The defendants paid 10*l.* into court, and denied their liability beyond that sum. It appeared that before any portion of the work was executed, the plaintiffs, on Dec. 12, 1838, addressed a letter to the committee of management of the club, and stated that they would not make any charge or claim for any professional services done by them previously to the club being established and in operation, and it was contended that the defendants were not liable, as all the work for which the plaintiffs claimed was done "previous to the establishment of the club," and that as the plaintiffs were themselves members of the club, they could not maintain an action against other members of it, who should be considered as co-partners. These being the main facts of the case, the Lord Chief Baron left it to the jury to say whether the letter of Dec. 12 was to be taken as the agreement under which the work was done. If they thought it was, the action could not be maintained. The jury, after a short consultation, returned a verdict for the defendants.

EXHIBITION OF WORKS OF ART FOR THE NEW PALACE.—On Tuesday, Lord Brougham presented a petition from certain artists, contributors to the exhibition of works of art now exhibiting in Westminster-hall. They complained, as we are informed, of the manner in which the prizes had been awarded, after only three days' view of a number of pictures which required a careful examination and a sifting inquiry into their respective merits, and they further urged, that, prior to an adjudication, the pictures ought to have been exhibited to the criticism of the public. The petitioners suggested that the artists of France, Germany, and Italy should have been called in as assessors before the commissioners had adjudicated, and they prayed that such a course should be taken before any person should be finally employed to decorate the walls of the new palace.

A SANITARY ASSOCIATION has been formed in Westminster for the diffusion of information on the subject of health and all its requisites, by means of public meetings, lectures, and otherwise, and for other cognate and laudable purposes, such as soliciting the co-operation amongst others of architects, engineers, surveyors, &c., towards the removal of those agents which injure the public health. Member's subscription, 1*l.* per annum, and upwards, or for life 5*l.* and upwards. Lord Ashley is the patron, and Lord R. Grosvenor the president.

UNIVERSITY COLLEGE PRIZES.—The name of the student who obtained the second prize in fine art, at the University College, is Thomas Watts, a pupil of Mr. Eales. The third certificate of the first year's fine art class was awarded to John George Hall.

PROPOSED CHURCH AT BROMPTON, KENT.—Mr. S. W. Daukes, of Cheltenham, is the successful competitor for the proposed new church at Brompton, Chatham, Kent. We understand there were sixteen competitors.

The destruction of a footpath and narrowing of a road at Gainsborough by the erection of a bridge tunnel on the Great Northern Line, has been producing considerable excitement there. A strenuous opposition has declared itself, and the works have been stopped.

TO CORRESPONDENTS.

"*Westminster Hall.*"—William the Conqueror is supposed to have built much at Westminster, but William Rufus is usually regarded as the founder of Westminster Hall about 1097. Matthew Paris says, at Christmas 1099, William Rufus, having returned from Normandy, held his first court in the *new hall* at Westminster.

"*The Temple Church.*"—We have delayed replying to "H. C. L.," with the view of giving a general account of the church. Consideration leads us to think, however, that it is already well known to the majority of our readers. The mixture of round and pointed work, in the circular portion of the church, is not unusual in works of the same date,—a period of transition. It was dedicated in 1185.

"*Regular Subscriber.*"—Apply to Weale, 59, High Holborn.

"*Colouring Compo.*"—A subscriber wishes to know the best mode of colouring a front which has been *painted*, so that the colour may stand.

"*J. G. H.*"—We are unable to promise insertion of the drawing at this moment.

J. K." does not touch the architectural question. We would avoid religious controversy.

"*Churchman*" (Kensington).—The matter is before us, and shall not be lost sight of. The freeholder may not think it desirable.

"*Constant Reader*" (Newcastle).—145, Strand.

"*C. J. G.*"—We forwarded a letter to the address named, some time ago.

"*Clerks of Works.*"—A correspondent complains that persons advertising for clerks, and calling upon candidates for testimonials, give no reply to the unsuccessful. The number of applicants, usually, would make the labour of replying a great one.

"*E. P.*"—We have not time to calculate strengths.

"*Constant Subscriber.*"—M. Daly's *Revue Generale* is a monthly publication. We shall speak of it in detail before long.

"*X. X. X.*"—Do not incur expenses "to prevent a sneer."

"*H. W.*"—We don't understand in what the "design" consists.

"*Constant Reader.*"—We shall give an analysis of the Sewers' Act next week, and he can then judge for himself.

"*J. S.*" (Blackfriars).—Our correspondent is wrongly informed as to the amount of shrinkage.

"*C. D.*"—Write to the architect (on the spot) or the incumbent.

"*W. R. C.*"—We will inquire.

"*Fireproof Buildings.*"—An architect asks for a list of the principal in the metropolis. We have not time to make it, but some of our readers may.

"*West Middlesex Water Works.*"—A correspondent complains that this company insist on an inch service being laid on, but will only drive a ½ ferule to attach it to.

"*Railway Traveller*," next week.

"*G. P.*" ditto.

"*P.*" ditto.

Received.—"W. W.," "C." "J. B." (Soho); "J. S.," "Rusticus," "Layman," "H. J. M.," "Young Architect," "J. W."

"*Books, Prices, and Addresses.*"—We have not time to point out books or find addresses.

ADVERTISEMENTS.

LAST WEEK.

ROYAL ACADEMY of ARTS, Trafalgar-square.—The Exhibition of the Royal Academy is now open. Admission (from Eight o'clock till Seven), One Shilling; Catalogue, One Shilling. JOHN PRESCOTT KNIGHT, R.A., Dep. Sec.

CHUBB'S IRON DOORS AND FIRE-PROOF SAFES.

C. CHUBB and SON having just erected a Steam Engine and extensive Machinery to meet the increasing demand for articles of their Manufacture, they beg to inform Architects and Builders that they are now enabled to manufacture Wrought Iron doors for strong rooms and other purposes, and Fireproof Safes at a great reduction in price, and of very superior quality. All their Iron Doors and Safes are fitted with C. CHUBB and SON'S best DETECTOR LOCKS.
57, St. Paul's Church-yard, London.

TO ARCHITECTS AND SURVEYORS.

C. CHUBB and SON having ascertained that some builders are in the habit of substituting inferior and insecure Iron doors for strong rooms, when "CHUBB'S MAKE" are ordered, they call the attention of Architects to the subject. In all specifications where it is intended to have the articles manufactured by C. CHUBB and SON, they respectfully request that Architects will specify "Iron doors manufactured by C. CHUBB and SON, of St. Paul's Church-yard," and to require on the completion of the work, a certificate from C. CHUBB and SON that the doors are of their manufacture.

PRO BONO PUBLICO.

CAUTION. To Purchasers of Locks, fire-proof Doors, Safes, &c. JOHN LEADBEATER, many years manufacturer for Chubb, LEADBEATER begs most respectfully to inform Architects, Surveyors, Builders, &c. that he can supply them IMPROVED DETECTOR LOCKS for universal purposes, STRONG WROUGHT-IRON FIRE-PROOF DOORS, SAFES, and CHESTS, &c. on the most improved principles of security against FIRE and THIEVES (without the aid of "expensive machinery," which is employed by some inexperienced makers, but must be paid for), at prices 25 per cent. under any other house in London.

LEADBEATER offers ONE HUNDRED POUNDS reward to any person who can pick his improved detector locks or latches. Some thousands of Leadbeater's strong-room doors and safes have now been put up without a SINGLE COMPLAINT, and fifteen years' practical experience, during which he has adapted every possible improvement to real security, enables him to challenge competition with any other house in London. A large assortment on sale and made to order. A pair of extra strong wrought-iron fire-proof folding doors with ventilating gates, well adapted for a banker's strong room, may be viewed at his manufactory. Strong wrought-iron doors for party walls, with wrought-iron rabbitted frames, and secured by the BEST DETECTOR LOCKS IN ENGLAND, 6 feet high by 2 feet 9 inches wide and upwards, price £10 each, always on hand at LEADBEATER'S MANUFACTORY, 125, ALDERSGATE-STREET, LONDON.

FIRE BRICKS.—WARD & HART, Honduras Wharf, Bankside, Manufacturers and Exporters of every sort of Fire Bricks, Lumps, Tiles, Clay, &c. Builders, Gas Companies, Engineers, Shippers, and all large buyers, supplied from ships from the Manufactories direct, at the lowest prices. A large Stock of every quality always on hand at the Wharf as above. Goods made to pattern at a short notice. Patent Corn Drying Malting Tiles. Lime, Sand, Gravel, Bricks, and Tiles, of every description.

PUMPS.—The attention of Architects, Builders, Contractors, Brickmakers, Barge and Ship Builders, and others, are respectfully requested to M. A. RICHARDS' superior Stock of Pumps for Roads, Gardens, Excavations, Brickfields, Liquid Manure, Barges and Ships, in Wrought or Cast Iron, bored perfectly true by Machinery. Hydraulic Lift Pumps for Wells of any depth. Single and Double Barrel Pumps up to 10-inch kept for hire. Estimates given to Drawings if required.—M. A. RICHARDS, 3, Old Barge-house-street, Commercial-road, Lambeth.

LITHOGRAPHY—IMPORTANT TO CONTRACTORS AND BUILDERS.

M. COON having discovered a new method of Lithographing Designs and Plans of every description, in about half the usual time, begs to inform Architects and Contractors that they may have plans of contracts lithographed by this method for about the ordinary price of tracings. Estimates for any number of copies will be given on inspection of a plan, &c. All orders, whether in town or country, promptly attended to.—Lithographic Printing Office, 18, Cheapside.

TO BUILDERS AND CARPENTERS.

A Considerable saving will be effected in the purchase of IRONMONGERY, by applying at F. B. WILLIAMSON'S Wholesale Warehouse, No. 25, Chiswell-street, Finsbury-square, near Whitbread's Brewery.

Best Patent Cut Clasp.

3d.	4d.	6d.	8d.	10d.	2nd.
6d.	7d.	9d.	1s.	1s. 6d.	2s. per 1,000.

Best Sheet Floor Brads 15s. per cwt.
Best Town Glue 40s. per cwt. Do. Scotch, 32s. per cwt.

Best Patent Sash Line.

1	2	3	4	5	6
4s. 3d.	5s.	6s. 6d.	7s. 6d.	10s.	12s. per gross.

Elliptic Stoves, 3d. per inch. Registers, 6½d., 7d. 8d., per inch.
Self-acting Kitchen Ranges, with Oven and Back Boiler.
Wrought Bars and Bright Fittings.

3 ft., £3. 3s.	3 ft. 6 in., £3. 12s. 6d.	4 ft., £4.

Lists of Prices had on application at the Warehouse; if by letter pre-paid, inclosing postage stamp.

TO ARCHITECTS, BUILDERS, &c.

R. HENLY and Co., WHOLESALE IRONMONGERS, and Manufacturers of KITCHEN-RANGES, STOVES, &c., 196, Blackfriars-road, and 117, Union-street, Borough.

Strong Self-acting Kitchen Ranges, with Back Boiler and Oven, and Wrought Bars:—

3 ft.	3 ft. 3 in.	3 ft. 6 in.	3 ft. 9 in.	4 ft.
£3. 6s.	£3. 13s.	£3. 16s.	£4.	£4. 10s.

Henly's Patent Improved, with back Boiler and Wrought Iron Oven:—

2 ft.	3 ft. 3 in.	3 ft. 6 in.	3 feet 9 in.	4 ft.
£5.	£5. 18s.	£6. 5s.	£6. 10s.	£7.

Best Register Stoves, at 7d., 8d., and 9d. per inch.
Do. Elliptic do., at 9½d., and 4d. do.

Manufacturer of WOLFASTON'S PATENT REGISTER STOVES, a certain cure for SMOKY CHIMNEYS, and effecting a great saving in fuel. To be seen in use daily.
Orders from the Country, accompanied with a remittance or reference, will meet with prompt attention.

OLD ESTABLISHED, WHOLESALE IRONMONGERY WAREHOUSE, Kitchen-range, and Stove-grate Manufactory, 18, Cross-street, Walworth.

JOHN GRICE most respectfully solicits the attention of Architects, Builders, and Carpenters, to his Stock of Black and Bright Stoves, Kitchen Ranges, &c., &c.
Black Registers, from 6½d. per in. and upwards.
Bright ditto with Black and Bright Bars, 9s. 10s. and upwards.
Self-acting Kitchen Ranges, with Oven and Back Boiler, Wrought Bars, Fittings Bright:—

3 ft.	3ft. 6 in.	4 ft.
2l. 9s.	3l. 14s.	4l. 8s.

All articles made on the premises and warranted, and delivered free of expense within five miles of London. Bell-hanging in superior style, hung in secret, 9s. per pull.

IMPORTANT TO ARCHITECTS, BUILDERS, and GENTLEMEN fitting up their own Houses.

PRETYMAN and HOBSON, being about to relinquish the Stove Trade, have a large and well-selected assortment of drawing and dining-room, library, and college Register Stoves, of the most recherché patterns, which they have determined to sell at a great reduction from the cost prices Stove and Range Manufactory, 17, Cornhill, opposite the Royal Exchange.

IRON-WORK FOR BAKERS' OVENS.

F. A. TIDDEMAN, Purfleet Wharf, Earl Street, Blackfriars, keeps an assortment of Stocks, or mouth pieces; Plates, Furnace-bars, Top and Fall Pieces, Stoppers, Chimney-bars, Inside, Outside, and Ash-pit, Doors and Frames, Boilers and Frames, Lamps, &c., &c.; all of the best description, at very moderate prices.—CAST-IRON UPSETS.

HOT WATER APPARATUS.—The attention of architects, builders, and others is respectfully requested to BENJAMIN FOWLER'S superior method of heating churches and chapels, halls, staircases, conservatories, forcing and greenhouses, manufactories, and warehouses, kilns, rooms for drying timber, &c., and every variety of purpose for which artificial heat is required. Within the last twenty years some hundreds of buildings have been heated upon this plan, and the parties for whom they were executed are constantly expressing their satisfaction, also their willingness to vouch for their efficiency. An improved wrought-iron boiler, which requires no brickwork, may be seen in action upon the premises.—BENJAMIN FOWLER, 63, Dorset-street, Fleet-street.

IRONFOUNDRY.
168, Drury-lane, and Charles-street, London.
JOSEPH GLOVER,
Late HENDRY and GLOVER),

BEGS to inform his Customers, that the PARTNERSHIP between him and WM. HENDRY is DISSOLVED, and that the whole of the business is now solely his; and in consequence of which, he has been enabled to make such arrangements and improvements that they will be insured every advantage in quality, price, and punctuality. The stock of patterns has been re-arranged, to give every facility for selection. A stock of Rain-water Pipes, Heads, Shoes, &c.

PORTER'S CORRUGATED and PA-TENT GALVANIZED IRON ROOFING WORKS, Southwark-bridge (and the Grove), Southwark. At the above Works, the Public are secure in having the superior make, and by the Patent process of Galvanizing Iron as first introduced into this Country, with many improvements in its application to Roofs, Buildings, &c. Every description of Building, Railway, and other Iron and Smith's work Manufactured of the best quality. Iron Fence and Hurdles as usual.—The Trade Supplied.

PREPARED FLOORING BOARDS.

AT REDUCED PRICES.

ALWAYS on SALE, a Large Assort-ment of DRY PREPARED FLOORING BOARDS, and MATCHED BOARDING of all sorts, planed to a parallel width and thickness, from ¼ inch to 1½ inch thick.
TIMBER, DEALS, OAK PLANKS, SCANTLINGS, SASH SILLS, &c.
Apply at W. CLEAVE'S Timber Yard, Wilton-road, Pimlico (late C. Moore and Son), and Great Smith-street, Westminster.

ALFRED ROSLING begs to inform the Trade and consumers generally, that he keeps constantly in stock a large and very general assortment of Prepared Floor Boards and Matched Boarding, planed to a parallel breadth and thickness, and fit for immediate use; also a variety of machine prepared Mouldings, which are finished with great accuracy and attention to quality of workmanship.—Southwark Bridge Wharf, Bankside, and Old Barge Wharf, Upper Ground-street, Blackfriars.

T. ADAMS (from Byron and Co.), late S. Dare, MAHOGANY and TIMBER MERCHANT, Bermondsey New Road, near the Bricklayers' Arms. SEASONED FLOORING, MATCH-BOARDING FIT FOR IMMEDIATE USE, and MOULDINGS prepared by machinery. Cut Deals and Scantling of every dimension. Mahogany, Cedar, Rosewood, Wainscot, Elm, Beech, Oak, &c., in planks, boards, veneers, and logs; Pantile, Oak, and Fir Laths; Wheelwrights' Goods. All sawn and prepared goods delivered free of expense (except timber). Sawing charged at mill prices. Very extensive Drying Sheds.

MUIR'S PATENT PLANING MACHINE.

SAW MILLS, GILLINGHAM-STREET, PIMLICO.

TIMBER of any Size, PLANK, DEALS, and BATTENS, &c. Sawn on the most approved principle. Boards, &c., Prepared, Matched, and Grooved, by Muir's Patent Machinery. The Mills have all the advantages of navigation and water-carriage, being connected with the Thames by the Grosvenor Canal. Goods fetched from the docks and carted home free of charge.
Address to HENRY SOUTHAM,
Saw Mills,
Gillingham-street, Pimlico.
N.B. Estimates given for Sawing and Planing.

SIR W. BURNETT'S PATENT for pre-venting the Decay of Timber, Canvas, and of all Vegetable and Animal Substances.
This process has long been in extensive use in her Majesty's Dock yards.—Vide Parliamentary Debate, April 13, 1847. It hardens and improves the texture of wood without injuring its elasticity, and renders it much less inflammable, and entirely so when prepared expressly for the purpose.
Licences granted to noblemen and gentlemen to use the preparation, and to contractors and others for the purposes of trade.
Hydraulic Apparatus and Tanks at the principal station, Millwall, Poplar. Square-rigged vessels can lay alongside the premises.
When the quantity of timber to be prepared is large, special contracts will be entered into on advantageous terms.
A liberal trade discount allowed to Builders, Sailmakers, and others introducing business.
Further information may be obtained and specimens seen on application to the Secretary, at the Offices, 33, King William-Street, London-bridge.

WOOD THOROUGHLY SEASONED IN DAYS INSTEAD OF YEARS BY DAVISON AND SYMINGTON'S PATENTED PROCESS.

THE Patent Desiccating Company beg to inform Architects, Builders, Cabinet Makers, Coach Builders, Ship Builders, and others, that their establishment (for seasoning, sawing, and planing wood), known as the Grand Surrey Mills, immediately adjoining the Commercial and East Country Docks, Rotherhithe, has commenced working. The sawing and planing will be done at the usual charges, and in the best possible manner. The new process of seasoning ensures the entire removal of moisture, hardens the gums, prevents further shrinkage (no matter how warm the temperature or hot the climate), strengthens the fibre, thus giving greater rigidity and compactness to the material, all of essential importance for floorboards, doors, shutters, and similar work. For licences to work the patent, scale of prices, or any further information, address, post-paid, or apply to W. H. TANQUERAY, Secretary, at the temporary offices of the Company, 29, New Broad-street, City.
N.B.—It has been satisfactorily ascertained that what are termed two-years seasoned flooring boards, contain from 8 to 10 per cent. of moisture, causing a shrinkage of one-eighth of an inch in the width of the board, which is obviated by the new process.

TO ARCHITECTS, Ship Joiners, Cabinet Makers, &c., requiring FINE WOOD.—SELLING OFF, at reduced prices, in consequence of a Dissolution of Partnership, at the Mahogany-yard, in Little Windmill-street, Haymarket, a choice collection of Fine MAHOGANY, Rosewood, Satinwood, Maple, &c., in planks of all thicknesses, and veneers; also upwards of 20,000 feet wainscot planks, running from 1¼ inch to 3 inches thick. The whole stock perfectly dry, and fit for use, requiring to be disposed of forthwith.

GREASE! GREASE! GREASE!— JAMES THOMAS FITT begs to inform Railway Contractors, that he is supplying Patent Grease at the following prices:—White Grease, 11s. per cwt.; Black Grease, 8s. 6d. per cwt. 2½ per cent. discount for cash.
Samples sent by addressing to J. T. FITT, Swan Mead, Bermondsey New-road, London.

HEAL AND SON have just completed the erection of Machinery for the purifying of feathers on a new principle, by which the offensive properties of the quill are evaporated and carried off in steam: thereby not only are the impurities of the feather itself entirely removed, but they are rendered quite free from the unpleasant smell of the stove which all new feathers are subject to that are dressed in the ordinary way.
Old Beds re-dressed by this process are perfectly freed from all impurities, and by expanding the feathers the bulk is greatly increased, and consequently the Bed is rendered much softer. The following are the prices of New Feathers:—

Mixed, per lb.	1s. 0d.	Foreign Grey Goose	2s. 6d.
Grey Goose	1s. 4d.	Best Foreign Grey Goose	2s. 0d.	Best Dantzic White Goose	3s. 0d.

HEAL and SON'S LIST OF BEDDING, containing full particulars of Weights, Sizes, and Prices, sent free by post, on application to heir Establishment, 196, opposite the Chapel, Tottenham-court-road.

SEYSSEL ASPHALTE COMPANY.

CLARIDGE'S PATENT.

Established March, 1838, for working the Mineral Asphalte Rock of Pyrimont Seyssel, a Bituminous Rock, situate on the Eastern side of the Jura.
Principal Depots, ROUEN, MARSEILLES, and STANGATE, Surrey side of Westminster-bridge, London.

THE ASPHALTE of SEYSSEL has been extensively used since March, 1838, for the following useful purposes:—

Foot Pavements.	Dog-kennels.	Covering of Railroad and other Arches.
Kitchen Floors (particularly where it is essential to keep damps from rising).	Barn Floors.	The only effectual mode to prevent the
Garden Walks and Terraces.	Granaries.	percolation of water, which also
Carriage Drives.	Tun-room Floors.	renders it very appropriate for the
Coach-houses and Stabling.	Malt-house Floors.	Lining of Tanks, Fish-ponds,
	Piggeries, &c. &c.	&c. &c.

The attention of RAILWAY ENGINEERS, ARCHITECTS, and CONTRACTORS is particularly directed to the great advantage to be derived from the application of SEYSSEL ASPHALTE.
The arrangements of the SEYSSEL ASPHALTE COMPANY, CLARIDGE'S PATENT, enable it to execute Works of any extent with the greatest promptitude.
In order to guard against the use of spurious materials, it is important that all applications for Works to be executed, be made direct to this Company; and as a further protection, it is suggested that Engineers, Architects, and Contractors should require a CERTIFICATE from the Company that the proper description of material has been used.
Information may be obtained as to all Works which have been executed by the Company since its establishment in 1838, which will prove that the failure of many Works represented to have been done with the genuine material, has resulted from the substitution of a spurious one.
I. FARRELL, Secretary,
Seyssel Asphalte Company, Stangate, London.